CONTENTS OF SUPPLEMENT.

PERSONAL 143
Obituary 143
ENGINEERING SOCIETIES 143
Coming Technical Meetings 143
CONSTRUCTION NEWS:
Condensed List of Contracts Pending 144
Railways 144
Street and Electric Railways 144
Electric Light and Power 145
Bridges 145
Buildings 145
Water-Works 146
Irrigation 147
Sewerage 147
Garbage Disposal and Street Cleaning 148
Streets and Roads 148
Manufacturing Plants 148
Gas Plants 148
Miscellaneous Contracts 149
Contract Prices 149, 151
INDUSTRIAL NOTES 150

PERSONAL.

Mr. A. B. Lind has been elected City Engineer of Stromsburg, Neb.

Mr. William C. Staley has been elected Water Commissioner of Lansingburg, N. Y.

Mr. Benjamin E. Briggs has been elected City Engineer of Erie, Pa., to succeed Mr. Geo. Platt.

Mr. P. D. O'Connell has been elected Superintendent of the water-works at Somersworth, N. H.

Mr. John B. Hunter has been elected City Engineer of Denver, Colo., to succeed Mr. P. O'Brien.

Mr. Joseph W. Suddard has been elected President of the Board of West Park Commissioners of Chicago, Ill.

Mr. Samuel S. Hoff has been elected City Engineer of Reading, Pa., succeeding Mr. Edward Chamberlain.

Mr. McGregor Patterson has been appointed Superintendent of the electric light works at Amherst, N. S.

Mr. D. M. Munro has been made Superintendent of the water-works and electric light plant at Rockville, Md.

Messrs. B. F. Von Behren, Fred. Grote and Jos. Brentano have been appointed members of the Water Board of Evansville, Ind.

Mr. F. H. Mason, mining engineer, has been made Consulting Metallurgist of the Brookfield Mining Co., Ltd., Brookfield, N. S.

Mr. R. C. Hollyday, Civil Engineer, U. S. N., has been detached from the Puget Sound Station and ordered to Mare Island, Cal.

Mr. J. W. Harkon, Master Mechanic of the Grand Trunk Ry. at Toronto, Ont., has been transferred to a similar position at Montreal, Que.

Mr. James H. Fuertes, M. Am. Soc. C. E., has removed his office from 277 Pearl St. to the Woodbridge Building, 100 William St., New York city.

Mr. H. J. Franklyn, Superintendent of the Toronto Street Ry., Toronto, Ont., has been appointed Secretary of the Board of Trade of Rossland, B. C.

Col. Geo. L. Gillespie, Corps of Engineers, U. S. A., has been detailed as a member of the Lighthouse Board, to succeed Brig. Gen. John M. Wilson, resigned.

Messrs. C. W. Gibbs and C. L. Greenwood, civil and mining engineers, have formed a partnership, with offices in the First National Bank Block, Telluride, Colo.

Mr. H. T. Simpson has been appointed Superintendent of Telegraph of the Chesapeake & Ohio Ry., with headquarters at Richmond, Va., to succeed Mr. M. B. Leonard, deceased.

Mr. Asa P. Blakeslee, Treasurer and General Freight and Passenger Agent of the Montrose Ry., has been appointed General Superintendent, with headquarters at Mauch Chunk, Pa.

Mr. Allen Hazen, consulting engineer, and water-works and sewerage expert, has removed his office from 85 Water St., Boston, Mass., to the St. Paul Building, 220 Broadway, New York city.

Mr. N. W. Boyd, formerly with the Frog & Switch Department of the Carlisle Mfg. Co., Carlisle, Pa., has become the Superintendent of the works of the New York Switch & Crossing Co., Hoboken, N. J.

Mr. Clark L. Pierce, formerly Assistant to the General Superintendent of the Central Vermont R. R., has been appointed General Superintendent of the Rutland R. R., with headquarters at Rutland, Vt., to succeed Mr. Jesse Burdett.

Mr. George Stanton, who has been connected with the Railway Department of the United States Wind Engine & Pump Co., of Batavia, Ill., for several years, has resigned to accept a similar position with Messrs. Fairbanks, Morse & Co., Chicago, Ill.

Mr. Joseph H. Sands, General Manager of the Norfolk & Western Ry., with headquarters at Roanoke, Va., has resigned. Mr. James M. Barr, formerly General Superintendent of the Great Northern Ry., will succeed him as Vice-President and General Manager.

Mr. A. S. Vogt, of Altoona, Pa., Chief Mechanical Engineer of the Pennsylvania R. R., has been chosen by Messrs. M. R. Muckle, Jr., and J. J. De Kinder as the third member of the commission of electrical experts to which they were appointed nearly a year ago for the purpose of examining into the cost and advisability of a city electric lighting plant for Philadelphia.

Mr. Fr. von Emperger, consulting engineer, of Vienna, Austria, has changed his address from 15 Opernring, 2 Stock, Thur 12 to IV. Hauptstrasse, 20, and his New York city address, care of Melan Arch Construction Co., from 71 Broadway to the Syndicate Building, 35 Nassau St.

Mr. G. H. Hutchison, M. Am. Soc. C. E., who, until April 1, had charge of the structural drawing-room of the Brown Hoisting & Conveying Machine Co., Cleveland, O., has been appointed Chief Engineer of the Pittsburg & Conneaut Dock Co., Carnegie Building, Pittsburg, Pa.

Sir Archibald Geikie, Director-General of the Geological Surveys of Great Britain and Ireland is to give a course of lectures at Johns Hopkins University, Baltimore, Md., on "The Founders of Geology," beginning April 14. The lectures have been provided to commemorate the late Prof. George Huntington Williams, Professor of Inorganic Geology of the university, by his widow.

Mr. Charles Hansel, Vice-President and General Manager of the National Switch & Signal Co., delivered a lecture before the College of Civil Engineering of Cornell University, Ithaca, N. Y., on April 16, his subject being "Safe Railway Operation and the Advancement in the Art of Signeling and Interlocking." The lecturer illustrated his remarks by lantern slides, a full size four-lever interlocking machine, two regular train staff instruments, as well as other details.

James R. F. Kelly & Co., contracting engineers, of New York, the firm being made up of Mr. James R. F. Kelly and Mr. W. G. Triest, have dissolved partnership by mutual consent. Mr. I. R. F. Kelly, M. Am. Soc. C. E., will continue the business in connection with Mr. A. D. Kelly, M. Am. Soc. C. E., under the firm name of Kelly & Kelly, with offices in the St. Paul Building, New York city. Mr. W. G. Triest has opened an office as a contracting engineer for iron work at No. 39 Cortlandt St., New York city.

Mr. M. L. Holman, Water Commissioner of St. Louis, Mo., has been appointed by Mr. August Hermann, President of the Cincinnati (O.) Water Commissioners, as a member of a commission of experts to examine plans proposed for extensions to the water-works of that city. Mr. Frederick P. Stearns, Chief Engineer of the Metropolitan Water Board, Boston, Mass., and Mr. Samuel M. Felton, civil engineer, of Cincinnati, O., the Receiver and President of the Cincinnati, New Orleans & Texas Pacific Ry., have also been appointed members of the board.

OBITUARY.

Mr. Henry F. Nelson, contractor, of Allegheny, Pa., died April 9.

Mr. James F. Parkinson, contractor, of Watertown, N. Y., died March 31.

Mr. James Cadman, civil engineer, died at Woodstock, N. B., March 29.

Mr. Charles Martin, contractor and builder, of Philadelphia, Pa., died April 14, aged 54.

Mr. W. H. H. Sissum, owner of the Sissum Machine Works, Newark, N. J., died April 5, aged 57.

Mr. John Y. Oliver, Secretary and Treasurer of the Mine & Smelter Supply Co., of Denver, Colo., died April 9, aged 42.

Mr. George Kennon, civil engineer, of Denver, Colo., at one time a member of the firm of McDonald & Kennon, U. S. Deputy Mineral Surveyors, died April 12.

Capt. Calvin A. Tarr, Engineer Corps, U. S. A., who has superintended the construction of several breakwaters along the Maine coast, notably those at Saco and Rockland, died at Saco, April 5, aged 63.

Dr. Dubois D. Parmelee, Consulting Chemist of the New York Belting & Packing Co., of New York city, died April 16, aged 66. He was graduated as a physician and chemist from the University of the City of New York and devoted his life to experimental chemistry. He was the inventor of the cold process of manufacturing rubber.

Mr. William Penn Humphreys, Assistant City Engineer of San Francisco, Cal., died April 5. He was born in Philadelphia, Pa., in 1829, and after graduating from Carlisle College, was appointed a midshipman in the U. S. Navy. In 1849 he went to San Francisco with the United States Coast Survey, resigning in 1857, and 1867 he was elected City Surveyor. He held this office until 1882, with the exception of one term. In that year he was elected Railroad Commissioner and served until 1886, in which year he went to Mexico, where he planned a sewer system for the City of Mexico. About six years ago he entered the office of the City Surveyor, where he served until his death.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

ENGINEERS' SOC. OF WESTERN PENNSYLVANIA.
May 17. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg.
CENTRAL RAILWAY CLUB.
Special meeting, April 23. Regular meeting, May 14. Secy., H. D. Vought, Buffalo "Courier," Buffalo, N. Y.
INDIANAPOLIS ENGINEERING CLUB.
April 24. Secy., Edson F. Folsom, Indianapolis, Ind.
WISCONSIN POLYTECHNIC SOCIETY.
April 27. Secy., W. K. Means, Loan and Trust Bldg., Milwaukee, Wis.
CIVIL ENGINEERS' SOCIETY OF ST. PAUL.
May 3. Secy., C. L. Annan, City Engineer's Office.
ENGINEERS' SOCIETY OF WESTERN NEW YORK.
May 3. Secy., Henry Vier, Library Bldg., Buffalo.
COLUMBIAN ENGINEERING SOCIETY.
May 4. Secy., F. W. Hart, 15th and H Sts., N. W., Washington, D. C.
WESTERN SOCIETY OF ENGINEERS.
May 5. Secy., N. L. Littleton, Monadnock Block, Chicago.
AMERICAN SOCIETY OF CIVIL ENGINEERS.
May 5. Secy., C. W. Hunt, 127 E. 23d St., New York city.
NATIONAL MUNICIPAL LEAGUE.
May 5, 6 and 7. At Louisville, Ky. Secy., Clinton S. Woodruff, 514 Walnut St., Philadelphia, Pa.
BROOKLYN ENGINEERS' CLUB.
May 6. Paper by Mr. F. A. Barron, on "Lighting New York Harbor by Electric Light." Secy., A. J. Provost, Jr., 191 Montague St.
CANADIAN SOCIETY OF CIVIL ENGINEERS.
May 6. Secy., C. H. McLeod, 112 Mansfield St., Montreal.
TECHNICAL SOCIETY OF THE PACIFIC COAST.
May 7. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.
MONTANA SOCIETY OF ENGINEERS.
May 8. Secy., Albert S. Hovey, Helena.
ENGINEERS' CLUB OF KANSAS CITY.
May 10. Secy., F. W. Tuttle, Baird Bldg.
AMERICAN FOUNDRYMEN'S ASSOCIATION.
May 10 to 14. Annual meeting at Detroit. Secy., John A. Penton, Detroit, Mich.
RAILWAY SIGNALING CLUB.
May 11. Secy., Geo. M. Basford, The Rookery Bldg., Chicago.
DENVER SOCIETY OF CIVIL ENGINEERS.
May 11. Secy., Walter Pearl, 36 Jacobson Bldg.
NORTHWEST RAILWAY CLUB.
May 11. Secy., T. A. Foque, Soo Line, Minneapolis.
CIVIL ENGINEERS' CLUB OF CLEVELAND.
May 11. Secy., F. A. Coburn, Case Library Bldg.
NEW ENGLAND RAILROAD CLUB.
May 12. Secy., Edwd. L. Jones, P. O. Box 1158, Boston.
ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
May 13. Secy., James K. Zollinger, Norton Bldg.
ENGINEERING ASSOCIATION OF THE SOUTH.
May 13. Secy., L. P. Brown, Nashville, Tenn.
ST. LOUIS RAILWAY CLUB.
May 14. Secy., H. H. Roberts, 511 Commercial Bldg.
ENGINEERS' CLUB OF COLUMBUS.
May 15. Secy., M. S. Hopkins, 14½ N. High St., Columbus, O.
ENGINEERS' CLUB OF PHILADELPHIA.
May 15. Secy., L. F. Rondinella, 1122 Girard St.
ENGINEERS' CLUB OF MINNEAPOLIS.
May 17. Secy., Elbert Nexsen, 1620 S. E. 4th St., Minneapolis, Minn.
TECHNICAL CLUB OF OMAHA.
May 17. Secy., J. Harry Lawrie, Omaha, Neb.
WESTERN RAILWAY CLUB.
May 18. Secy., W. D. Crossman, The Rookery, Chicago.
ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
May 19. Secy., F. Van Vleck, Los Angeles, Cal.
ASSOCIATION OF ENGINEERS OF VIRGINIA.
May 19. Secy., J. A. Pilcher, Roanoke, Va.
BOSTON SOCIETY OF CIVIL ENGINEERS.
May 19. Secy., S E. Tinkham, City Hall.
AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS.
May 19. Secy., R. W. Pope, 26 Cortlandt St., New York city.
WESTERN FOUNDRYMEN'S ASSOCIATION.
May 19. Secy., A. Sorge, Marquette Building, Chicago.
ENGINEERS' CLUB OF ST. LOUIS.
May 19. Secy., Richard McCulloch.
SOUTHERN AND SOUTHWESTERN RAILWAY CLUB
May 20. Kimball House, Atlanta, Ga. Secy., F. A. Charpiot, Macon, Ga.
ENGINEERS' CLUB OF CINCINNATI.
May 20. Secy., J. F. Wilson, P. O. Box, 333.
NEW YORK RAILROAD CLUB.
May 20. Secy., W. W. Wheatly, 168 Montague St., Brooklyn.
AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
May 24 to 29, at Hartford, Conn. Secy., F. R Hutton, 12 West 31st St., New York City.
MASTER CAR BUILDER'S ASSOCIATION.
June 8. Annual meeting at Old Point Comfort, Va. Secy., J. W. Cloud, Rookery Bldg., Chicago, Ill.
AMERICAN WATER-WORKS ASSOCIATION.
Annual meeting at Denver, Colo., June 8, 9 and 10. Secy., Peter Milne, 95 William St., New York city.
NORTHWESTERN TRACK AND BRIDGE ASSOC.
June 11. Secy., D. W. Meeker, St. Paul, Minn.

RAILWAY SIGNALING CLUB.—The regular bi-monthly meeting of the club was held at the Great Northern Hotel, Chicago, Ill., April 9, and the report of the Committee on Rules for Railway Signaling presented at the January meeting was discussed.

AMERICAN FOUNDRYMEN'S ASSOCIATION.—The committee in charge of arrangements for the entertainment of the Association in Detroit, May 10 to 14, has secured Harmonie Hall for convention headquarters. The second floor will be divided into spaces for an exhibition by manufacturers and dealers in foundry supplies and equipment.

CIVIL ENGINEERS' SOCIETY OF ST. PAUL.—At the meeting on April 5 Mr. Walker and Mr. Cross, two students at the State University, showed samples and gave some general results af about 200 tests of the holding power of various sizes of nails in white and Norway pine. The experiments will be extended and the results tabulated and presented to the Society for discussion at a future meeting.

FRANKLIN INSTITUTE, Philadelphia.—Secy., Dr. Wm. H. Wahl. Stated meeting of the Electrical Section, April 27, 8 p. m. Papers as follows: H. Lyman Sayen, on his "New Form of Crookes Tube, with Automatically Adjustable Vacuum; also Some New Forms of X-Ray Apparatus." F. H. Lincoln, "Emergency Engineering," following the recent fire at the power station of the Union Traction Co. C. J. Toerring, "The Enclosed Arc."

ENGINEERS' CLUB OF PHILADELPHIA.—At the meeting on April 3 Mr. Charles Jacobson presented a paper on experiments for determining the velocity of the flow of water. The experiments, which were made for the Bureau of Surveys of the city, were made on two sizes of the Haskell wheel-meter, which is of the propeller type. The results were compared with the discharge from a standard weir as obtained from Francis' formula and with

the measurement of a Venturi meter, and were found to be very nearly equal. When sufficient data have been collected to draw positive deductions the latter will be presented to the club.

CENTRAL RAILWAY CLUB.—At the meeting of the club held March 12 a report of the Committee on "Piece Work in Car Repairs" was presented and discussed. The report recommended the system as a desirable one to follow, and advised its consideration by those having car repair work in charge. A paper entitled "Electricity" was also read by Mr. F. B. Griffith, but was not discussed. This paper drew several comparisons between the transmission of power for railway shops by electricity and compressed air, respectively, but took no definite position regarding either method. Mr. Griffith's paper was followed by a short report of the Committee on "Apprentice Boys in Railway Shops." The discussion on this report was very brief.

MONTANA SOCIETY OF ENGINEERS.—At a special meeting of the society, held in Helena, on March 29, a discussion was had upon the County Surveyors' Convention which was to meet on the following day. Hon. Lewis Penwell, of the last legislative assembly, was appointed a committee of one to prepare an opinion upon the road law to present at the convention. The new road law, which is materially different from any other road law in the United States, inasmuch as it places the construction and maintenance of roads and bridges entirely under the supervision of county surveyors, was then read and discussed. The introduction of this law was largely through the instrumentality of the Montana Society of Engineers. At a meeting held on the following day it was announced that a permanent state organization had been perfected to be known as "The Montana Association for the Improvement of Public Highways" and that it would adjourn on the following day to meet again in January, 1898, on the same day as the annual meeting of the Montana Society of Engineers.

A. S. Hovey, Secy.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
Apr. 22.	Street signs, Brooklyn, N. Y.		Apr. 15
Apr. 22.	Hospital buildings, Ward's Island, N. Y. H.		Apr. 15
Apr. 22.	Jail, etc., Brookings, S. Dak.		Apr. 15
Apr. 22.	Htg and ventilating hospl, Townsend, Wash.		Apr. 1
Apr. 22.	Repairing pier at St. Josephs, Mich. Advertised, Eng. News, Mar. 25 to Apr. 15.		Mar. 25
Apr. 22.	Bridge, Brooklyn, N. Y. Advertised, Eng. News, Apr. 8 and 15.		Apr. 8
Apr. 23.	School building, Logan, Utah		Apr. 8
Apr. 23.	Brick and pipe sewer, Wilkes Barre, Pa. Advertised, Eng. News, Apr. 1 and 8.		Apr. 1
Apr. 23.	College building, Athens, Ga.		Apr. 15
Apr. 23.	Asphalt paving, New York, N. Y.		Apr. 15
Apr. 23.	Bonds, Galveston, Tex.		Apr. 15
Apr. 23.	Iron bridge, New Auburn, Minn.		Apr. 22
Apr. 23.	Sewer, Pittsburg, Pa.		Apr. 22
Apr. 23.	Electric lighting, Brooklyn, N. Y.		Apr. 22
Apr. 23.	Pipe sewer, New Britain, Conn.		Apr. 22
Apr. 24.	Drains, etc., Jamaica, L. I.		Apr. 22
Apr. 24.	Iron pipe, Pittsburg, Pa.		Apr. 22
Apr. 24.	Macadamizing, Jamaica, L. I., N. Y.		Apr. 22
Apr. 24.	Street improvement, Quincy, Ill.		Apr. 22
Apr. 24.	Paving, Pittsburg, Pa.		Apr. 22
Apr. 24.	Sewers (Section 50), Boston, Mass.		Apr. 15
Apr. 24.	Stone crusher, etc., Portland, Me. Advertised, Eng. News, Apr. 15 and 22.		Apr. 15
Apr. 24.	Removing wrecks (7), St. Augustine, Fla. Advertised, Eng. News, Mar. 25 to Apr. 15.		Mar. 25
Apr. 24.	Grading, curbing, etc., Charlotte, N. C.		Apr. 8
Apr. 24.	Court house, Knox, Ind.		Apr. 8
Apr. 25.	Garbage disposal, Syracuse, N. Y.		Apr. 8
Apr. 25.	Masonry work, Tuskaloosa, Ala.		Apr. 15
Apr. 26.	Water-works bonds, Aberdeen, Md.		Apr. 15
Apr. 26.	Brick and pipe sewer, Toledo, O.		Apr. 15
Apr. 26.	Improving driveway, Boston, Mass.		Apr. 15
Apr. 26.	Pocket dump, New York, N. Y.		Apr. 15
Apr. 26.	Asphalt paving, New York, N. Y.		Apr. 15
Apr. 26.	School building, Cairo, Ill.		Apr. 8
Apr. 26.	Sewer, Wabash, Ind.		Apr. 8
Apr. 26.	Brick paving (44,000 sq.yds.), Marietta, O.		Apr. 1
Apr. 26.	Digging, etc., Brooklyn, N. Y.		Apr. 22
Apr. 26.	Church building, Hartford City, Ind.		Apr. 22
Apr. 26.	Bridge painting ($5,000), New York, N. Y.		Apr. 22
Apr. 26.	Asphalt paving, Rochester, N. Y.		Apr. 22
Apr. 26.	Sewer extension, Ventura, Cal.		Apr. 22
Apr. 27.	Water pipe (17,000 ft.), St. Louis, Mo.		Apr. 22
Apr. 27.	Boilers (8), St. Louis, Mo.		Apr. 22
Apr. 27.	Granite blocks (130,000), Nashville, Tenn.		Apr. 22
Apr. 27.	Bridge piers, St. Louis, Mo.		Apr. 22
Apr. 27.	Brick and pipe sewers, Boston, Mass.		Apr. 22
Apr. 27.	Locks and dams in Monongahela River, Pa. Advertised, Eng. News, Mar. 25 to Apr. 15.		Mar. 25
Apr. 27.	Lock and dams in Allegheny River, Pa. Advertised, Eng. News, Mar. 25 to Apr. 15.		Mar. 25
Apr. 27.	Smokeless powder, Philadelphia, Pa.		Apr. 1
Apr. 27.	Pier extension, South Haven, Mich. Advertised, Eng. News, Apr. 1 to 22.		Apr. 1
Apr. 27.	U. S. building work, Richmond, Ky.		Apr. 15
Apr. 27.	Water mains, Kearney, N. J. Advertised, Eng. News, Apr. 15 and 22.		Apr. 15
Apr. 27.	Water-works, Benson, Minn.		Apr. 15
Apr. 28.	Steel bridge spans, Boston, Mass. Advertised, Eng. News, Apr. 15 and 22.		Apr. 15
Apr. 28.	Paving, Buffalo, N. Y.		Apr. 15
Apr. 28.	Water main (7,500 ft.), Jefferson Brks, Mo.		Apr. 1
Apr. 28.	Water bonds, Gallup, N. Mex.		Apr. 8
Apr. 28.	Sewer, Easton, Pa.		Apr. 22
Apr. 28.	Brick paving, Toronto, Ont.		Apr. 22
Apr. 28.	Bridges, Brooklyn, N. Y.		Apr. 22
Apr. 29.	Asphalt paving, Brooklyn, N. Y.		Apr. 22
Apr. 29.	Steel projectiles, Washington, D. C.		Apr. 8
Apr. 29.	Dredging, etc., Oswego, N. Y. Advertised, Eng. News, Apr. 1 to 22.		Apr. 1
Apr. 29.	Rock excavation, etc., Oswego, N. Y. Advertised, Eng. News, Apr. 1 to 22.		Apr. 1
Apr. 29.	Dredging, Portland, Me. Advertised, Eng. News, Apr. 15 and 22.		Apr. 15
Apr. 29.	Bath house work, Fort Douglas, Utah		Apr. 15
Apr. 29.	Brick paving, Easton, Pa. Advertised, Eng. News, Apr. 15 and 22.		Apr. 15
Apr. 29.	School building, Waterloo, Ia.		Apr. 15
Apr. 30.	Water supply, Hoboken, N. J. Advertised, Eng. News, Apr. 15 to 29.		Apr. 15
Apr. 30.	Bridge pier, Washington, D. C. Advertised, Eng. News, Apr. 15 and 22.		Apr. 15
Apr. 30.	Jail, etc., Hillsboro, N. Dak.		Feb. 25
Apr. 30.	Repairing steamer, Boston, Mass.		Apr. 8
Apr. 30.	Pipe sewer, Albert Lea, Minn.		Apr. 8
Apr. 30.	Water-works, Medina, O. Advertised, Eng. News, Apr. 15 and 22.		Apr. 15
Apr. 30.	Fire boat, etc., New York, N. Y.		Apr. 22
Apr. 30.	Relaying cobblestone, Brooklyn, N. Y.		Apr. 22
Apr. 30.	Bridge, Columbus, O.		Apr. 22
Apr. 30.	Steel bridge, Green Bay, Wis.		Apr. 22
Apr. 30.	Water pipe, lead, yarn, etc., Frederick, Md. Advertised, Engineering News, Apr. 22.		Apr. 22
Apr. 30.	Brick paving, Minneapolis, Minn.		Apr. 22
May 1.	Street sweeping, removal, etc., Atlanta, Ga.		Apr. 22
May 1.	Electric light plant, Astoria, Ore.		Apr. 22
May 1.	Heating, etc., Lancaster, Pa.		Apr. 22
May 1.	Bonds ($50,000), Pelham Manor, N. Y.		Apr. 22
May 1.	Iron and steel, Cincinnati, O. Advertised, Eng. News, Apr. 1 to 15.		Apr. 1
May 1.	Removing wreck in New York Harbor. Advertised, Eng. News, Apr. 15 to 29.		Apr. 15
May 2.	Court house, Eastland, Tex.		Apr. 15
May 3.	Bonds ($75,000), Jacksonville, Fla.		Apr. 1
May 3.	Brick paving, Marietta, O.		Apr. 8
May 3.	Pumping engine, St. Paul, Minn. Advertised, Eng. News, Apr. 8 to 29.		Apr. 8
May 3.	Court house work, Clinton, Ia.		Apr. 15
May 3.	Paving, etc., Albany, N. Y.		Apr. 15
May 3.	Brick paving (18,600 sq. yds.), Bradford, Pa. Advertised, Eng. News, Apr. 15 and 22.		Apr. 15
May 3.	School building, Alexandria, Minn.		Apr. 15
May 3.	Paving, Elmira, N. Y. Advertised, Engineering News, Apr. 15.		Apr. 15
May 3.	Pile bridge, Fargo, N. Dak.		Apr. 22
May 3.	Court house, Texarkana, Ark.		Apr. 22
May 3.	Refrigerating plant, New York, N. Y.		Apr. 22
May 3.	Flagging sidewalks, Brooklyn, N. Y.		Apr. 22
May 3.	Brick and asphalt paving, Oswego, N. Y. Advertised, Engineering News, Apr. 22.		Apr. 22
May 4.	Steel and iron work, New York, N. Y.		Apr. 22
May 4.	Prison, New York, N. Y.		Apr. 22
May 4.	Dredging, New York, N. Y.		Apr. 22
May 4.	Layg water pipe (11,000 ft.), Malden, Mass. Advertised, Eng. News, Apr. 22 and 29.		Apr. 22
May 4.	Paving, New York, N. Y.		Apr. 22
May 5.	Bridge, Colusa, Cal.		Apr. 22
May 5.	Court house, Decatur, Ga.		Apr. 22
May 5.	Sewer construction, Warren, Pa. Advertised, Engineering News, March 25.		Mar. 25
May 5.	Steel bridges (4), Natchez, Miss.		Apr. 15
May 6.	Wire, rivets, nuts, etc., Washington, D. C.		Apr. 15
May 6.	Bridge, Wenatchee, Wash.		Apr. 15
May 6.	Dredging (50,000 cu. yds.), Milwaukee, Wis. Advertised, Eng. News, Apr. 8 to 29.		Apr. 8
May 6.	Jail, Eastman, Ga.		Apr. 22
May 6.	Water tunnel, Buffalo, N. Y. Advertised, Eng. News, Apr. 22 and 29.		Apr. 22
May 7.	Electric light franchise, Folsom City, Cal.		Apr. 22
May 7.	Dredging, Detroit, Mich. Advertised, Eng. News, Apr. 22 and 29.		Apr. 22
May 7.	Sewer supplies, Pawtucket, R. I.		Apr. 15
May 7.	Brick and chert paving, Meridian, Miss. Advertised, Eng. News, Apr. 15, 22 and 29.		Apr. 15
May 8.	Canal work ($75,000), Ottawa, Ont.		Apr. 22
May 10.	Brick and pipe sewer, South Bend, Ind.		Apr. 22
May 10.	Brick paving, South Bend, Ind.		Apr. 22
May 10.	Court house, Galveston, Tex. Advertised, Engineering News, Apr. 22.		Apr. 22
May 10.	Mantels, Fort Hancock, N. J. Advertised, Eng. News, Apr. 15 and 22.		Apr. 15
May 10.	Court house, Galveston, Tex.		Apr. 15
May 11.	Water-works, Westpoint, Miss.		Apr. 22
May 12.	Underground station, Boston, Mass. Advertised, Eng. News, Apr. 22 to May 6.		Apr. 22
May 13.	Steel bridges (3), Toronto, Ont. Advertised, Engineering News, Apr. 22.		Apr. 22
May 14.	Repairing pier at Portage Lake, Mich. Advertised, Eng. News, Apr. 22 to May 13.		Apr. 22
May 14.	Dam, power house, etc., Manchester, N. H. Advertised, Engineering News, Apr. 22.		Apr. 22
May 15.	Electric lighting (5-yr. cont.), Mobile, Ala. Advertised, Eng. News, Apr. 22 and 29.		Apr. 22
May 15.	County bonds ($20,000), The Dalles, Ore.		Apr. 22
May 15.	Court house, etc., Fort Wayne, Ind. Advertised, Eng. News, Apr. 8 to 29.		Apr. 8
May 15.	Railway ties for 5 years, St. Louis, Mo.		Apr. 15
May 17.	Breakwater at Burlington, Vt. Advertised, Eng. News, Apr. 22 to May 13.		Apr. 22
May 18.	Electric light plant, McMinnville, Tenn.		Apr. 22
May 18.	Water-works, McMinnville, Tenn.		Apr. 22
May 19.	Dredging (600,000 cu. yds.), Chicago, Ill. Advertised, Eng. News, Apr. 8 to 29.		Apr. 8
May 19.	Extending pier at Muskegon, Harbor Mich. Advertised, Eng. News, Apr. 22 to May 13.		Apr. 22
May 20.	Plans for court house, Anderson, S. C.		Apr. 22
May 20.	Bonds ($40,000), Union, S. C.		Apr. 22
June 1.	Drainage canals, etc., New Orleans, La. Advertised, Eng. News, Mar. 25 to Apr. 29.		Mar. 25
June 1.	Pumping stations, etc., New Orleans, La. Advertised, Eng. News, Mar. 25 to Apr. 29.		Mar. 25
June 3.	Canal work (8 miles), Chicago, Ill. Advertised, Eng. News, Apr. 15 to May 6.		Apr. 15
Jun. 23.	Court house, Anderson, S. C.		Apr. 22

RAILWAYS.

ATLANTA & ALABAMA.—Rights of way for this railway are being secured by Col. R. M. Mitchell, Pres. It is said that the road will extend from Atlanta through Fulton, Campbell, Coweta, Douglass and Heard counties in Georgia, and Chambers, Clay, Tallapoosa, Elmore, Antauga and Dallas counties in Alabama, to Selma in the last-named county.

BALTIMORE & OHIO.—Press reports state that the delivery of the new steel rails along this railway will commence about April 20, and the work of laying them will require all summer. About 500 additional men will be employed between Washington Junction and Cumberland at this work. The best of the old rails will be used on branch lines. Work has commenced on the new tunnel at Falls Cut, on the Pittsburg Division, 20 miles from Cumberland. The tunnel will be between 500 and 600 ft. in length. W. T. Manning, Ch. Engr., Baltimore, Md.

COLORADO SPRINGS & CRIPPLE CREEK.—This company has been incorporated, with a capital stock of $100,000, to construct a railway from Colorado Springs, Colorado City and Manitou to Cripple Creek, Victor and Gillett along the route most feasible as the surveys may show; also to build to the summit of Pike's Peak from any point along the line it may designate. The incorporators are J. A. Himebaugh, Edward F. Wright, E. J. Eaton, J. B. Severy and John Campbell, of Colorado Springs, Colo.

GAYLORD & RUBY VALLEY.—This Montana company has filed articles of incorporation, with a capital stock of $500,000. The directors of the new company are Edwin W. Winter, Pres., Northern Pacific Ry.; John W. Kendrick, Gen. Supt.; Edwin H. McHenry, Ch. Engr., and Charles W. Bunn, all of St. Paul; and William Wallace, of Helena, the attorney for the Northern Pacific in Montana. The majority of the stock is held by the Northern Pacific Ry. Co., each of the incorporators owning but one share. It is said that surveyors have begun operations at Gaylord and expect to have construction commenced by May 1. The road will extend from Gaylord south through the Ruby Valley and Twin Bridges to a point near the state line.

GULF AND INTERSTATE.—A press report states that the Texas railway commission has approved an issuance of $250,000 in bonds by this company for the purpose of extending, improving its road and providing adequate terminal facilities at Port Bolivar. L. E. Beadle, Ch. Engr., Beaumont, Tex.

KEOKUK & WESTERN.—A press report states that this road has let contracts for considerable grading between Des Moines and Van Wert. It is said that as soon as this work is completed the work of changing the gage on the road south from Van Wert to Cainsville, Mo., will be commenced, and that contracts will then be let for the extension from Cainsville to Pattonsburg. F. T. Hughes, Pres.; A. C. Goodrich, Ch. Engr., Keokuk, Ia.

MICHIGAN CENTRAL.—This railway, it is said, will build a new line to Mackinaw, passing through Alma, so as to obtain a new outlet to the north and southwest. A. Torrey, Ch. Engr., Detroit, Mich.

MOBILE, JACKSON & KANSAS CITY.—A press report states that the Gulf City Construction Co., which has the contract for grading this railway, has sublet the contract for the completion of the section of about 15 miles from Mobile to Hardin & Decker, of Quitman, Ga. Chief Engineer F. H. Collins and General Manager S. T. Parrett, of the Gulf City Construction Co., are inspecting the line as far as Hattiesburg, Miss., with a view to letting more contracts for the grading of the road.

NEW MEXICO.—A press report from Santa Fe, N. Mex., states as follows: A Las Vegas corporation, said to be backed by the Santa Fe Ry. and Maxwell Land Grant Co., has been incorporated for the construction of 100 miles of railway in Colfax and Taos counties, the object of which is to provide the gold district of Baldy, Elizabethtown, Red River and the Taos mountains with railway facilities. The incorporators are: Glen M. Latimer, E. H. Smith, Robert L. M. Ross, Thomas W. Hayward and Jack Bethl, all of Las Vegas. The capital stock is $2,500,000, of which $10,000 has been paid over to Glen M. Latimer, Treas. The main line is to commence at Maxwell City, on the Atchison, Topeka & Santa Fe, and runs thence via the Cimarron River and Moreno Valley, through the main pass in the Taos mountains and across the Taos Valley, to connect with the Denver & Rio Grande at a point west of the town of Cordoba, a distance of 82½ miles. A branch line will reach Elizabethtown and Red River City, and a 6-mile spur will be run up the creek to the Baldy gold district.

STREET AND ELECTRIC RAILWAYS.

ATTLEBORO, MASS.—The Norton & Attleboro St. Ry. Co. has been incorporated, with a capital stock of $40,000 by D. E. Saunders, Salem, Mass.; L. C. Powers, Somerville, Mass.; Albert A. Babb, Malden, Mass., and others, to build an electric road, 5½ miles long.

FRAMINGHAM, MASS.—W. B. Ferguson, Pres. Milford, Hollister & Framingham St. Ry. Co., has applied to the selectmen of West Medway for a franchise.

LEOMINSTER, MASS.—The construction of the Clinton & Worcester St. Ry. is reported as proposed by A. S. Patton and C. E. Dresser, of this city. Capital stock, $150,000. It is said that the same parties are interested in a projected road from North Leominster to Hudson, to cost about $100,000.

WORCESTER, MASS.—The Worcester & Marlboro St. R. R. Co., of Worcester, is erecting at Northboro, Mass., a new power station. The engine room is 55 × 63 ft., and the boiler room 45 × 40 ft. The roof, which is to be gravel on plank, is supported by steel trusses. Cutting & Bardwell, of Worcester, Mass., are the general contractors for the work, and the steel work will be erected by the Berlin Iron Bridge Co., of East Berlin, Conn.

BETHANY, CONN.—The Woodbridge & Bethany Electric R. R. Co. has applied to the railroad commissioners for a franchise. Talcott H. Russell and E. P. Arvine are interested. Engr., A. B. Hill, 82 Church St., New Haven.

ADDISON, N. Y.—F. H. Wheaton, Addison, is asking for capital to construct an electric railway from this place to Woodhull.

BUFFALO, N.Y.—The new Buffalo Traction Co. is ready to begin laying rails, and it is stated that 15 or 20 miles in the downtown district will be under construction within 10 days. A committee of investigation has been to New York where it inspected several methods of propulsion. So far as can be learned, it is in favor of using electricity. Pres., E. G. S. Miller.——The Buffalo, Niagara River & Grand Island Ry. Co. was incorporated April 12 with a capital stock of $30,000, to operate an electric railway from Buffalo to the dock of the Buffalo & Grand Island Ferry on the Niagara River in Tonawanda. Directors, Donoto A. Crage, Wm. E. Pench, 2369 Niagara St., Geo. A. Ricker, C. E., 1200 D. S. Morgan Bldg., Buffalo; J. H. Metcalf, Herbert P. Bissell, Geo. C. Riley, James Murphy, Charles W. Ricker, and Frank W. Carr, all of Buffalo.

MAYVILLE, N. Y.—Work will probably be begun this spring on the proposed Westfield & Mayville Electric Ry. in which C. C. Minton, Pres., Mayville State Bank, and Geo. M. Pullman, Chicago, Ill., are said to be interested.

NASSAU, N. Y.—The Greenbush & Nassau Electric Ry. Co. has decided upon a route for its line, according to reports.

PRATTSBURG, N. Y.—The Kenona & Prattsburg Ry. Co. has been incorporated with a capital stock of $120,000 to operate the property and franchises of the Kenona & Prattsburg R. R. Co., in Steuben county. Directors: Lewis V. P. Randolph, J. L. Suydm, William Carpenter, H. V. Post, Joseph F. McNamara, L. M. Jones, C. P. Pomeroy, New York, and J. W. Fowler, Aiken, S. C.

SAVONA, N. Y.—Plans and estimates for completing the construction of the Savona Valley & Lake Keuka Electric Ry. are being prepared by the Chenango Engineering Co., Ackerman Bldg., Binghamton, N. Y. This road extends from Savona, on the Erie and D., L. & W. R. Rs., to Keuka on Lake Keuka, a distance of 20 miles. The roadbed is completed excepting two miles at northern terminus. The company is about to negotiate a loan for the completion of the construction.

BRADFORD, PA.—We are informed by H. G. Lowe, Olean, N. Y., and Lynn, Mass., that the contract has been let to the Pierce Construction Co., Leominster, Mass., for building the Olean, Rock City & Bradford Electric R. R., 20 miles ling. The surveys have been made and the right of way obtained. Pres., W. B. Ferguson, Boston, Mass.; Ch. Engr., H. L. Pierce, Leominster, Mass.

COLUMBIA, PA.—Wm. B. Given, Receiver for the Pennsylvania Traction Co., Columbia, writes us that he has asked the U. S. Circuit Court for permission to buy a 300-HP. engine; two 150-HP. boilers, a 260 K-W. generator; eight new cars, a 50-HP. electrical equipment, 4½ miles of feeder wire, one mile of new 60-lb. track, etc. Estimated cost, about $50,000.

GETTYSBURG, PA.—The Washington & Gettysburg Ry. Co. has been incorporated with a capital stock of $100,000 by G. W. Cissel, Edgar P. Berry, Albert Gleason and others.

WESTCHESTER, PA.—The Philadelphia, Castle Rock & West Chester Electric Ry. Co. will soon extend its road to this place. Eli Lewis is interested.

CHARLESTON, S. C.—The Charleston City Ry. Co. last week notified the secretary of state of South Carolina that the company would at once increase its capital stock from $100,000 to $850,000, and asked that the charter be extended for 50 years, as the present charter is about to expire. This road will be included in the general system of street railways. The Charleston Electric Ry. Co., composed chiefly of New York and Baltimore capitalists, have recently started to equip, having bought the City Co.'s road and charter.

SUMMERVILLE, S. C.—A charter was last week granted to J. S. Lawrence, of Baltimore, Md., and P. H. Gadsden, of Charleston, to build and operate an electric railway at this place. It will be built at once, our correspondent writes.

CINCINNATI, O.—The Consolidated St. Ry. Co. has been granted permission by the Cincinnati & Harrison Turnpike Co. to construct its electric road on the pike to Westwood.

PAINESVILLE, O.—Chas. H. Moody has asked the county commissioners for a franchise for an electric road between Painesville and Fairport.

BAY CITY, MICH.—Local papers state that the Consolidated St. Ry. Co. is advertising for bids for furnishing 10,000 ties. The company is said to have already ordered 100 tons of steel rails to be delivered May 1, and 100 tons to be delivered May 15.

SAGINAW, MICH.—The council has approved the plans and specifications prepared by the Saginaw Consolidated St. Ry. for reconstructing its line on several streets. Gen. Mgr., N. J. Hart.

AURORA, ILL.—The Aurora, Yorkville & Morris Ry. Co. has been incorporated to construct and operate a street railway in Kane, Kendall and Grundy counties. Capital stock, $10,000; incorporators, Vine A. Watkins, H. P. Horde and Fayette D. Winslow.

EAU CLAIRE, WIS.—The Chippewa Valley St. Ry. Co. has been granted a franchise in this city. Estimated cost, $10,000. T. F. Framley and H. M. Bates are interested.

OSHKOSH, WIS.—It is said that John McKinley, of New York, N. Y., and J. W. Edwards, of Winneconne, Wis., are arranging for the construction of an electric road between this city and Stevens Point by way of Poyseppi, Pine River, Wild Rose, and Plover.

PITTSBURG, KAN.—Robt. Simons, Pres., Pittsburg, Kan., and Westchester, Pa., writes us that the Pittsburg, Frontenac & Suburban Ry., four miles long, was completed April 14. Ch. Engr., J. Ellwood, Pittsburg, Kan.

ST. LOUIS, MO.—J. H. Gunlach, 3615 North Broadway, St. Louis, writes us that North St. Louis citizens are endeavoring to organize a company to build an electric railway five miles long on North Market St., to serve as an east and west connecting road for that part of the city. It is also proposed to establish a railway station for all trains entering the city from the north.

SALEM, ORE.—The Salem & Suburban Ry. Co. has been incorporated to purchase and improve the Salem Motor Ry. Co., by E. P. McCornack, of Salem; F. H. Page, of Portland, Ore., and others.

ASTORIA, ORE.—The Astoria & Suburban Ry. Co. has been incorporated to build an electric railway, telegraph and telephone lines, etc. J. W. Conn, F. W. Newell, and W. A. Sherman are interested.

OAKLAND, CAL.—It is reported that C. P. Huntington is collecting data in regard to changing the motive power of the local roads of the Southern Pacific R. R. Co., from steam to electricity. Chas. F. Crocker and Chas. A. Bailey, of Berkeley, Cal., may be addressed.

REDLANDS, CAL.—The Redlands Electric Light & Power Co. is reported to be securing money for improvements, extensions, etc., to the horse car line, which it proposes to purchase and convert into an electric road; estimated cost, $35,000. K. H. Field and C. M. Baxter are interested.

ELECTRIC LIGHT AND POWER.

MANCHESTER, N. H.—Bids are asked until May 14 for constructing a wooden dam, with masonry abutments, wing and river walls, in the Piscataquog River in Goffstown; also for a one-story brick power house, 88 × 30 ft., inside measurement, head gates, etc., as described in our advertising columns. Pres., Robie Whitney; Treas., Geo. A. Leighton; Supt., Eugene S. Whitney, Union Electric Co.; Bartlett & Gay, Engrs., Manchester, N. H.

BOSTON, MASS.—The following bids were received April 12 for installing a system of electric lighting for Revere Beach Parkway, reservation and bathing establishments, as noted in our issue of April 8: Lord Electric Co., $12,340; Boston Electric Co., $10,300; Clark I. Mills, $14,600; Edwin C. Lewis, $20,131; Godfrey Electric Construction Co., $14,700; Hawks Electric Co., $13,675; Thomas W. Byrne, $13,677; John S. Porter, $9,774.

BROOKLYN, N. Y.—Bids are asked until April 23 for furnishing electric lights for streets and public buildings in this city; bond, $15,000. Theodore B. Willis, Comr. Cy. Wks.

BUFFALO, N. Y.—Local papers state that the commissioners of public works have recommended to the board of aldermen that 58 new lights be placed in the district bounded by the Buffalo River, Michigan, Genesee and Franklin Sts. M. M. Drake, Comr. Pub. Wks.

LANCASTER, N. Y.—The board of trustees has awarded to Ernest Feyler a five-year contract for supplying this town with 20 1,200-c. p. arc lights at $65 a month, according to reports.

LOCKPORT, N. Y.—Press reports state that the council accepted, April 12, the bid of the Lockport Gas & Electric Light Co. to supply the city with 209 arc lights at $72 a year and 96 gas lights at $18.50 each a year.

MOHAWK, N. Y.—The board of water and light commissioners has awarded the contract for the electric light plant to the Fort Wayne Electric Co., Fort Wayne, Ind., and the contract for furnishing the shafting, boilers and engine to the Atlas Engine Works, Indianapolis, Ind. The contract price is said to have been about $3,200 for the engine, boilers and shafting and about $7,500 for the electrical equipment.

SALISBURY, MD.—The council has rejected the offer of a new company which is seeking a franchise to erect a plant and do the city lighting, and has made a contract with the Wicomico Falls Electric Light & Milling Co.

MOBILE, ALA.—Bids are asked until May 15 for lighting the city for five years with 200 2,000-c. p. arc lights; bond, $10,000, as stated in our advertising columns. Harry T. Inge, Chn. St. Com.

BROOKHAVEN, MISS.—A special election will be held on May 10 to vote on the question of issuing $40,000 in bonds for the proposed electric light plant and waterworks. Sanders & Porter, Des. Engrs., Louisville, Ky.

HOLLY SPRINGS, MISS.—Plans and specifications are being prepared by Walter G. Kirkpatrick, Nashville, Tenn., and Canton, Miss., for the proposed electric light plant and water-works.

LOUISVILLE, KY.—J. H. Pearson, Ch. Engr., informs us that this city is about to have plans and specifications prepared for the future electric lighting of the streets and public places, the present contract expiring in June. Correspondence solicited.

M'MINNVILLE, TENN.—Bids are asked until May 18 for constructing an electric light plant and water-works. J. C. Guild, Engr., Chattanooga; J. C. Biles, Chn. Com.

SPENCERVILLE, O.—Reports state that an electric light plant will be installed in this town at an early date.

CHICAGO, ILL.—This city has awarded a contract to Joyce & Shortall for putting in an electric lighting system on Ogden Ave., from Madison to 12th St., about 1¼ miles. The Chicago Edison Co. has also awarded a contract for lighting to the same firm.

GRACEVILLE, MINN.—Chas. F. Loweth, St. Paul, is preparing plans for an electric light plant for this town; capacity, about 600 lights. M. L. Noonan, Mayor.

OMAHA, NEB.—Reports state that the Thomson-Houston Electric Light Co. will spend about $100,000 in improving its plant. W. F. White, Gen. Man.

OURAY, COLO.—An electric light plant is to be established in this town, according to reports.

GEORGETOWN, COLO.—Thos. B. Campbell, Town Clk., writes us that this town has made a contract with the United Light & Power Co. for street lighting.

COLORADO SPRINGS, COLO.—It is said that the El Paso Electric Light Co. will extend its line to Ivywild at an estimated cost of about $5,000.

ASTORIA, ORE.—Bids are asked until May 1, for installing a 60 arc light plant to be run by an impulse water wheel. Arthur L. Adams, Engr., 401 California St., San Francisco, Cal.

FOLSOM CITY, CAL.—Bids are asked until May 7, for the purchase of a franchise to construct and maintain an electric light and power plant. W. B. Hamilton, County Clk., Sacramento.

SAN JOSE, CAL.—Press reports state that surveys are being made for a new power house which it is proposed to build on the Los Gatos Creek, to supply light and power to the surrounding country. John Ryland is said to be interested.

OGDEN, UTAH.—The Pioneer Electric Co.'s power house and plant has been completed at a cost of about $1,000,000 and is to be tested this week.

SALT LAKE CITY, UTAH.—Local papers state that the Pioneer Electric Power Co. will be granted a franchise to erect poles, string wires, etc., in this city. C. K. Bannister, Ch. Engr.

TORONTO, ONT.—The Toronto Electric Light Co. will build a one-story brick power house on Esplanade St., at an estimated cost of about $10,000, according to reports.

NEW COMPANIES.—The Amsterdam Electric Light, Heat & Power Co., Brooklyn, N. Y.; $500,000; to furnish electricity in Brooklyn and other towns, villages and cities in the state. Frank G. Writer, Edward J. Prest, New York City; Henry Keale, Brooklyn.

Trenton & Mohawk Valley Power Co., Utica, N. Y.; $500,000; to supply electric light and power to cities and towns in the state; Angelo W. Myers, Richard A. Cunningham, Edward J. Slattery and William A. Chapman, New York city.

The Progress Co., Salt Lake City, Utah; $10,000; to supply light to Murray, Utah; Harry Haynes, John P. Cahoon, Reynolds Cahoon.

Grafton Construction Co., Saco, Me.; $10,000; to construct and operate an electric light plant; Pres., Nathan Pike, Quincy, Mass.; Treas., Frank A. Dearborn, Boston.

Norfolk Light & Power Co., Norfolk, Va.; $25,000; Pres., William Rosborough; Treas., A. E. Krise.

Westerville Electric Light, Power & Water Co., Westerville, O.; $40,000; to supply light and power. G. W. Meeker, N. B. Abbott.

Ahlm-Edwards Electric Co., Medina, O.; $25,000; to supply light and power. C. E. F. Ahlm.

Hancock Electric Co., Hancock, N. Y.; $10,000; L. E. Howard, T. F. Furie, T. F. Stimpson.

Goodrich Falls Electric Co., Bartlett, N. H.; $30,000; United Electric Light Co., Jefferson, City, Mo.; $100,000.

Cripple Creek District Reservoir, Water & Supply Co.; $100,000; to operate in El Paso, Fremont and Pueblo counties; L. D. Ross, M. Dinsel, William T. Danlet.

Bandon Light & Water Co., Bandon, Ore.; $5,000; to furnish light and water for general use; Elbert Dyer, A. H. Buckingham.

John M. Klein Electrical Works, San Francisco, Cal.; $50,000; J. M. Klein, J. T. Stone et al.

Mutual Benefit Light & Heat Co., San Francisco, Cal.; $500,000; all paid in; W. P. Harrison, R. S. Lawrence et al.

Bay City Electric Light & Power Co.; $750,000; Louis de Rome, H. C. Knowles et al.

Suburban Electric Light Co., Hempstead, L. I.; $25,000; Frank M. Frany, Brooklyn; Franklin H. Corwin, Woodhaven; Oliver M. Chase, New York city.

BRIDGES.

NORTHAMPTON, MASS.—A hearing will be had May 11 upon the proposed South St. bridge. L. M. Thacher, Cy. Engr.

BROOKLYN, N. Y.—Bids are asked until April 28, postponement from April 22, as advertised, for constructing bridges between this city and Long Island City. William J. Wassmuth, Secy. Joint Bridge Com., 340 Fulton St.

BUFFALO, N. Y.—E. B. Guthrie, Cy. Engr., has been instructed by the board of councilmen to prepare plans for a bridge, also for a tunnel or subway, one or the other of which will be utilized to connect lower Main St. with the island, a strip of land cut off from the city by the river and canal. This project will relieve the congested state of lower Main St., permitting the island to be used for excursion docks, etc. The subway plan is the one that will probably be adopted, as it will not interfere with the shipping interests, which are extremely heavy at that point.

HIMROD, N. Y.—The Northern Central Ry. Co. will at once build new steel bridges in place of bridges 12 and 13 at Big Stream and Himrod, N. Y. The masonry has been awarded to Whalen & Higgins, Waverly, N. Y.

LOWHILL, PA.—Pascoe & Crilly, Allentown, Pa., have been awarded the contract to build two iron bridges over Jordan Creek, in this township, at $4,165.

NEW BRIGHTON, PA.—The directors of the old Brighton bridge between this place and Beaver Falls have decided to submit a proposition to the stockholders, at their annual meeting on April 26, to replace the present old structure with a new, modern one, to cost $60,000 or $70,000.

ATLANTA, GA.—Reports state that the bridge committee will meet in a few days to decide upon the question of constructing a viaduct over the railway tracks at Mitchell St. It is estimated that this improvement will cost about $150,000. R. M. Clayton, Cy. Engr.

KINGSTON, TENN.—The county court has decided to erect a 650-ft. steel bridge over the Clinch River at this place, at an estimated cost of about $50,000.

COLUMBUS, O.—Bids are asked until April 30 for constructing a bridge across Big Run on the Harrisburg pike in Franklin township, bids to be made separately for the substructure, superstructure and paving. The substructure includes 280 perch new sandstone masonry, 62 perch old limestone masonry, relaid, 200 cu. yds. wet excavation, 600 cu. yds. dry excavation, 500 cu. yds. fill and back fill, 20 perch old riprap masonry, relaid, 75 cu. yds. gravel, 48 lin. ft. 12 × 18-in. limestone wheel courses, and 5 rods protection fence. The superstructure includes a single roadway, through, plate girder span, 54 ft. out to out of angles and 22 ft. center to center of trusses, with buckle-plate floor; skew or span is 20°. The paving includes about 132 sq. yds. of Hallwood block pavement on concrete base, including tarring of buckle-plates. W. H. Halliday, County Audr.

TOLEDO, O.—County Commissioner Newton has been authorized to have a bridge built over Swan Creek, on the Warner stone road one mile north of Warner's Corners.

YOUNGSTOWN, O.—David M. Wise, County Engr., writes us that the Youngstown Bridge Co. has been awarded the contract for constructing the superstructure of the Spring Common bridge. The bids were published in our issue of April 15.

LEAF RIVER, ILL.—The Clinton Bridge & Iron Works, Clinton, Ia., has been awarded the contract to build steel bridges in this county.

PRIMGHAR, IA.—N. M. Stark & Co., Des Moines, Ia., has been awarded the contract to construct an 80-ft. and a 120-ft. steel bridge in O'Brien county.

DECORAH, IA.—The following bids were received April 14 for constructing a 100-ft. steel bridge between Fayette and Winneshiek counties:

Stemmer & Dittmar, Elkader, Ia.	$1,099
R. D. Wealen Bridge Co., Chicago, Ill.	1,087
Clinton Bridge & Iron Works, Clinton, Ia.	1,078
Milwaukee Bridge Co., Milwaukee, Wis.	1,627
D. H. Young, Manchester, Ia. (accepted)	1,099
J. G. Ratcliff, Waukon, Ia.	1,149

NEW AUBURN, MINN.—Bids are asked until April 23 for constructing a 70-ft. iron or wooden bridge over Buffalo Creek. D. D. Graves, Clk.

GREEN BAY, WIS.—Bids are asked until April 30 for steel bridge span across Fox River at this place. E. L. Shaw, Cy. Engr.

ST. LOUIS, MO.—Bids are asked until April 27 for constructing the foundation piers for the proposed bridge along Clark Ave., from 18th to 20th St. Robt. E. McMath, Pres. Bd. Pub. Improvements.

HILLSBORO, TEX.—Reports state that the commissioners' court has decided to build 14 new steel bridges in this county to replace those destroyed by the recent high water.

FARGO, N. DAK.—Bids are asked until May 3 for constructing a pile bridge across Maple River in Cornell township. C. J. Olson, County Audr.

DENVER, COLO.—Press reports state that a new viaduct will be constructed across the Platte River on 18th St., from Wazee to Central St., to be about 3,600 ft. long and to cost about $300,000. T. J. Milner, Ch. Engr., Bd. Pub. Wks.

HEBER, UTAH.—The county commissioners have been petitioned to construct a bridge across the river near Bench Creek, according to reports.

COLUSA, CAL.—Bids are asked until May 5 for constructing a 200-ft. bridge between Maxwell and River Plains.

FRESNO, CAL.—The county supervisors have been petitioned for a bridge over Kings River in section 26.——County Supervisor Hoxie is investigating the matter of erecting two bridges across the river on the sites that have been proposed.

OAKLAND, CAL.—It is reported that the county supervisors have passed a resolution, to obtain plans and specifications for two bridges in the Pleasanton road district. M. K. Miller, Supt. Sts.——The Southern Pacific Ry. Co. has decided, it is said, to construct a bridge over the estuary independent of the one to be constructed by the county supervisors.

SACRAMENTO, CAL.—Swanson & Son have petitioned the board of trustees to construct a bridge over the drainage canal below the Y St. levee.

TORONTO, ONT.—Bids are asked until May 13 for constructing two steel bridges to carry the Grand Trunk Ry. and one steel bridge to carry the Canadian Pacific Ry. over the Queen St. subway. Robt. J. Fleming, Mayor.

BUILDINGS.

GORHAM, ME.—Doley & Shackford, of Gorham, are reported to have been awarded the contract for building the dormitory, exclusive of plumbing and heating, for the Gorham Normal School, at $15,883. The other bidders were John Summers, James Cunningham, Spencer Rogers, Jere Philbrook & Son, Blackstone & Smith, John W. Burrowes, Portland, Me.; George E. Robinson, Boston, Mass.; Nathaniel Noyes & Son, Augusta, Me.; J. C. Knight, Westbrook, Me.; Theodore Shackford, Gorham; E. G. Johnson, Stroudwater, Me.; R. S. Robinson, William H. Leavitt & J. C. Knight, Gorham, who bid jointly. G. A. Robertson and J. A. Hinckley, of Gorham, are on the committee.

BOSTON, MASS.—Bids are asked until May 12 for constructing the Scollay Square underground station, as described in our advertising columns. B. Leighton Beal, Secy., Boston Transit Comn., 20 Beacon St.

GARDNER, MASS.—Plans are being prepared for a new brick and stone high school building to cost about $35,000. Archs., Barker & Nourse, 425 Main St., Worcester, Mass.

SPRINGFIELD, MASS.—The people of this city contemplate the erection of a new city hall building, according to reports.

NEW HAVEN, CONN.—Reports state that a new brick building, 26 × 40 ft., is to be erected soon for the New England Telephone Co.

ALBANY, N. Y.—The citizens' committee, Clark T. Durant, Secy., is endeavoring to secure the erection of a new union railway station in this city, to replace the present building.——A bill is to be introduced into the legislature which provides for an appropriation of $1,250,000 for the completion of the capitol building; reports state that the bill has the sanction of Governor Black.

BINGHAMTON, N. Y.—The following bids for erecting a new court house in this city were received by the board of supervisors of Broome county on April 6:

Andrew Douglas, Binghamton	$116,697
H. H. Edgerton, Rochester, N. Y.	114,000
Conrad Schroeder, Scranton, Pa.	116,800
P. J. Carlin & Co., Brooklyn, N. Y.	118,000
A. Frederick & Sons, Rochester, N. Y.	114,788
Sullivan & Badgley, Binghamton	112,750
Miles Leonard, Binghamton (accepted)	94,815

BROOKLYN, N. Y.—The Church of the Holy Trinity, Dr. Samuel D. McConnell, Pastor, expects to soon erect a new parish house, to cost about $30,000, in honor of the late Dr. Charles H. Hall. Over $23,000 has already been donated. Lyman R. Greene, George F. Peabody, William C. Howard and Alfred Fraser compose the committee.

BUFFALO, N. Y.—Plans have been prepared for a five-story brick and stone store and apartment building, to cost about $40,000. Arch., A. E. Koehn, Broadway, near Michigan St.

BUFFALO, N. Y.—Bids will soon be asked for erecting a new building at Park Lake for the Buffalo Historical Society. The society has a building fund of $40,000, to which the city has added $25,000. Pres., Andrew Langdon.——The park commissioners will erect a new glass and stone conservatory during the summer in the botanical gardens at South Park, to cost about $100,000. William Hengerer, Chn. Comrs.——It is reported that the German general hospital will soon erect its new building, at a cost of about $75,000. Arch., George J. Metzger, 19 West Huron St.——The Alabama Flats, which have stood so long uncompleted, will soon be enlarged and finished at a cost of $70,000. Archs., Lovering & Whelan, Fornes Bldg.——Plans have been prepared for school building No. 18 at West Ave. and School St. to cost $49,000. Arch., Aug. C. Essenwein, 316 Pearl St.——Plans have been filed for a new home and school for deaf mutes to be erected at Main St. and Forest Ave. Arch., W. H. Archer, 85 W. Eagle St.——A new electric elevator is to be erected on the Buffalo River near the Ohio St. bridge, to cost about $150,000. The Steel Storage Elevator Construction Co., Connersville, Ind., has been awarded the contract. E. A. Eames is interested.——Another grain elevator of brick, iron and steel, with a capacity of 1,000,000 bus., is also contemplated. Reports state that Armour & Co., and Bartlett, Fraser & Co., Chicago, Ill., are interested.——In a recent report to the board of education of this city Henry P. Emerson, Supt. of Public Instruction, recommended the erection of a new high school building to accommodate 1,500 scholars; estimated cost, $150,000.——The erection of a three-story parochial school building, to cost about $50,000, is contemplated by St. Columba's Church, Eagle and Hickory Sts., of which Rev. Michael Connery is pastor.——The following bids for constructing four hydraulic elevators were recently received by the city hall trustees; Chn., Lyman H. Baker; Buffalo Engineering Co., Buffalo, $40,865; Otis Bros. & Co., New York, $35,127; Howard Iron Works, Buffalo, $33,000.

LANSINGBURG, N. Y.—A new granite chapel building is to be erected for the Christian Scientists at 2d St. and Cemetery Ave., to cost about $15,000. Archs., Brite & Bacon, 111 5th Ave., New York, N. Y.

NEW YORK, N. Y.—Bids are asked by the department of correction until May 4 for furnishing the labor and materials for erecting a city prison to be built either of limestone or of granite; two bonds of $100,000 each are required; bids are also asked for the structural steel and iron work required in the erection of the same; two bonds of $20,000 are required. Comr., Robert J. Wright, 148 East 20th St.——A bill has been approved by Mayor Strong which authorizes the expenditure of $2,500,000 for erecting a library building in Bryant Park for the consolidated Astor-Lenox-Tilden library.——Plans have been filed by Jeremiah C. Lyons, 67 East 127th St., for erecting a seven-story brick flat at Park Ave. and 73d St., to cost about $90,000. Archs., Buchanan & Deisler, 11 East 59th St.; by John W. Hammersley, 414 Madison Ave., for a fourteen-story brick office building at 64 and 66 John St., to cost about $400,000. Archs., Harding & Gooch, 253 Broadway; by the hospital for the relief of the ruptured and crippled, 42d St. and Lexington Ave., for a five-story brick and stone hospital and dispensary building at 414 Lexington Ave., to cost about $250,000. Arch., Chas. C. Haight, 111 Broadway; by Frank H. Gray, for a seven-story brick and granite warehouse at Greenwich and Jane Sts., to cost about $100,000. Arch., D. W. King, 111 5th Ave.; by G. L. Lawrence, 197 Franklin St., for a five-story brick and stone apartment house at 113th St. and Amsterdam Ave., to cost $75,000. Archs., Neville & Bagge, 217 West 125th St.; by St. Paul's Lutheran Evangelical Association, 226 6th Ave., for a one-and-a-half-story brick and stone church building on 22d St., to cost $80,000. Arch., F. A. Minuth, 822 Broadway.——The following bids were received by the mayor on April 15 for erecting a hospital building on Gouverneur Slip; the work to be completed in 15 months from signing the contract:

Mapes-Reeve Const. Co., 150 Nassau St.	$116,000
M. J. Mahoney, 52 New Bowery	129,400
Jas. D. Murphy, 200 Broadway	131,330
Dey & Somerville, 210 East 123d St.	133,017
Thomas Dwyer, Temple Court	133,200
Luke O. Burke, 401 West 59th St.	136,000
P. Gallagher, 156 5th Ave.	137,749
Jas. R. F. Kelly & Co., 26 Cortlandt St.	138,490
Jno. T. Johnson, 114 East 124th St.	146,721
P. K. Lantry, 707 Lexington Ave.	146,780
Murphy Bros., 407 East 101st St.	148,801
Enoch W. Hooper, Trenton, N. J.	150,789

NEW YORK, N. Y.—Plans have been filed by Virginia Brugnelli, 2 Bradhurst Ave., for five five-story brick flats; Arch., J. C. Cavinato, 317 W. 142d St.——A seven-story brick and granite warehouse, costing $100,000, is to be erected at Greenwich and Jane Sts for Frank H. Gray.

ROCHESTER, N. Y.—It is reported that the Lehigh Valley R. R. Co. has advertised for bids for constructing a new passenger station to cost about $150,000, exclusive of the masonry. The trainshed will be 400 ft. long.

ROSLYN (L. I.), N. Y.—Reports state that a new school building will be erected in this place to cost $15,000.

TROY, N. Y.—The Y. M. C. A. of this city is to erect a new gymnasium and library building, 70 x 50 ft., to cost about $35,000. Archs., M. F. Cummings & Son, 10 Times Bldg.——The following bids were received toward the erection of a four-story business building at Fulton and 3d Sts., for Wm. H. Frear & Co. Archs., Mortimer L. Smith & Son, 78 Home Bank Bldg., Detroit, Mich. Mason work: Peter H. Buckley (accepted), $114,000; Chas. P. Boland, $132,700; McGill & Crowley, $135,024; E. W. Broderick & Son, $138,300. Carpenter work: Charles Duncan (accepted), $26,000. Structural iron work: M. Mahoney, Troy (accepted), $47,000.

ATLANTIC CITY, N. J.—On April 12 the council passed an ordinance authorizing the erection of a new city hall to cost $80,000.

NEWARK, N. J.—The construction of five new public buildings in this city, to cost $1,480,000, will soon be started, for which purpose bonds are to be issued. They will include a $300,000 city hospital, a $300,000 high school, a $300,000 free library, a $200,000 armory and a $380,000 court house.

PASSAIC, N. J.—It is said that White & Stevenson, of Paterson, N. J., have been awarded the contract for constructing the fire and police station at $31,392.

HARRISBURG, PA.—Reports state that plans will be received until July 11 for the new capitol building in this city. Prof. Warren Powers Laird is the architectural adviser of the commission.

JOHNSTOWN, PA.—Plans have been prepared for the erection of a $75,000 school building in this place.

LAKE CARY, PA.—A company has been formed with a capital stock of $100,000 to erect a hotel at this place to cost about $65,000. Pres., Asa P. Blakslee, Mauch Chunk, Pa.

LANCASTER, PA.—Bids are asked until May 1 for installing a system of heating, ventilating and lighting at the court house. John B. Eshleman, Chn. County Comrs.

PHILADELPHIA, PA.—Plans are being prepared for erecting 40 brick dwellings at Wayne Junction for E. K. Vanderslice, 3420 N. 6th St., to cost about $100,000. Arch., E. A. Wilson, 401 Bourse Bldg.——The trustees of the Eden Methodist Episcopal Church expect to erect a new brick and stone church building at Lehigh Ave. and Lawrence St., to cost about $60,000. Arch., Gladstone Hulme, Strasburg, Pa.——The Tacony Protestant Episcopal Church contemplates the erection of a brick and stone church edifice to cost $50,000. Arch., E. H. Salter, Reading, Pa.——The contract for the factory and office building to be erected at 1307 to 1313 Market St., at a cost of $100,000, for the Gibson estate, has been awarded to John Wiggins, 1220 Filbert St. Archs., Hewitt Bros., 310 Bullit Bldg.

PITTSBURG, PA.—The Church of the Ascension will erect a new building on Ellsworth Ave., East End, to cost about $80,000. Rev. R. W. Grange, Pastor, 4734 Wallingford Ave.——Plans are being prepared for a central armory building to cost $300,000. Jas. S. McKean, Chn. Bldg. Com.; Archs., Rutan & Russell, 111 4th Ave.——Plans are being prepared for the branch Carnegie Free Library building which is to cost between $50,000 and $100,000.

PITTSBURG, PA.—The contract has recently been awarded for the erection of a new building, 365 x 146 ft., for the Sisters of the third order of St. Francis. Arch., Sidney F. Heckert, 341 6th Ave.

WASHINGTON, PA.—The people of this place contemplate the erection of a new county court house building.

FAIRMONT, W. VA.—The county commissioners have recently accepted plans for a new county court house building in this town at a cost of $125,000.

YORK, PA.—Plans are being prepared for an addition to the court house in this city to cost about $45,000.

WHEELING, W. VA.—The Metropolitan Opera House Co. will erect a four-story opera house to cost about $80,000. Pres., Joseph Speidel; Treas., W. A. Wilson; Secy., C. F. Dickinson.

ANDERSON, S. C.—Plans and specifications are asked until May 20 for a $35,000 court house and jail; also until June 23 for the erection of the same. W. P. Snelgrove, County Supervisor.

BRUNSWICK, GA.—Plans have been accepted for the new court house to be erected at this place; estimated cost, $40,000. Arch., Frank P. Milburn, Charlotte, N. C.

DECATUR, GA.—Bids are asked until May 5 for furnishing the labor and material for erecting a new court house building adjacent to the present building. W. M. Ragsdale, County Ordinary.

EASTMAN, GA.—Bids are asked until May 6 for erecting a brick jail at this place. Arch., L. F. Goodrich, 115 8th St., Augusta, Ga. John W. Bohannon, Ordinary.

JACKSONVILLE, FLA.—About $75,000 will probably be expended soon on new school buildings.

GLENALLEN, ALA.—The Gulf Coast Co., Chicago, Ill., will erect a three-story hotel building, 100 x 200 ft., in this place, to cost about $50,000. Arch., John D. Atchison, 84 La Salle St., Chicago, Ill.

NEW ORLEANS, LA.—A fire in this city on April 15 damaged property valued at about $400,000; insurance, $293,000. Among the buildings damaged were the Moresque building, the Washington hotel, and the German "Gazette" office.

CHATTANOOGA, TENN.—The erection of a new high school building in this city is being considered.

WATER VALLEY, TENN.—The county supervisors are said to have awarded the contract to A. C. Williams, Atlanta, Ga., for constructing a court house at $20,992.

NAPOLEON, O.—Plans are being prepared for H. H. Vocke for a three-story and office building to cost about $35,000. Arch., E. O. Fallis, The Nasby, Toledo, O.

TOLEDO, O.—A three-story brick and terra-cotta apartment and office building has been planned for C. S. Ashley, which is to cost about $30,000. Arch., J. H. Pulford, The Nasby.

UPPER SANDUSKY, O.—The people of Wyandotte county have decided to erect a new court house at this place.

HARTFORD CITY, IND.—Bids are asked by the building committee of St. John the Evangelist Roman Catholic Congregation until April 26 for furnishing the material and labor for erecting a new edifice. Rev. Charles Dhe, Chn.; Archs., Sutter & Putnam, Barney Bldg., Dayton, O.

INDIANAPOLIS, IND.—Plans have recently been accepted for the new police station, which is to cost aout $75,000. Arch., Adolph Scherrer, 9½ Illinois St.

CHICAGO, ILL.—A building to be used as a home for the aged is to be erected at Sheffield and Fullerton Aves. at a cost of $60,000. Archs., Egan & Prindeville.

QUINCY, ILL.—Plans are being prepared for a five-story brick and stone office building at 5th and Main Sts. for Mrs. Hattie Wood; estimated cost, $20,000. Arch., Ernest Wood, 7th and Hampshire Sts.

DETROIT, MICH.—An apartment and business building is to be erected at Grand River and Lincoln Aves. for the Hodges Bros., at a cost of about $125,000. Arch., W. S. Joy, Hodges Block.

MILWAUKEE, WIS.—The Milwaukee Medical College has recently been granted a permit to erect an addition to its building at 9th and Wells Sts., to cost $60,000.

CEDAR RAPIDS, IA.—The contract will soon be awarded for erecting the superstructure of the new Masonic temple, which is to be five stories high and to cost about $80,000. Arch., J. W. Ross, McCullogh Bldg., Davenport, Ia.

CENTERVILLE, IA.—The people of Appanoose county will vote May 15 on the question of erecting a court house, to cost $65,000.

MARSHALLTOWN, IA.—Plans have been prepared for a new brick and stone city hall, 64 x 130 ft., to cost about $40,000. Mayor, F. G. Pierce; Arch., J. H. Prescott, 120 W. Main St.

ST. PAUL, MINN.—A bill making the following appropriations for erecting the following public buildings has been introduced in the legislature: Fergus Falls, new buildings, $100,000; St. Peter, new building, $75,000; Rochester, new building, $36,000; Faribault, three new buildings, $30,000, equipments, etc., $33,000; State university, equipment, books, shortage, $58,500; agricultural school, new buildings, $43,000; Duluth, foundation for normal school, $5,000; Grand Rapids experimental station, $5,000; Crookston, experimental station, $5,000; St. Cloud, State reformatory, new building, $21,000; Red Wing, State training school, new building, $17,000.

TEXARKANA, ARK.—Bids are asked until May 3 for erecting a new county court house at this place, according to reports. Address J. M. Montgomery.

GALVESTON, TEX.—The Union Passenger Depot Co. has been incorporated to erect a union depot and other buildings; capital stock, $200,000. L. J. Polk, George Sealy, C. F. Resiguie, F. M. Bilbough and J. W. Terry are interested.

GALVESTON, TEX.—Bids are asked until May 10 for constructing a county court house, as stated in our advertising columns; bond, $50,000. Archs., N. J. Clayton & Co., Galveston; Geo. H. Law, Jr., Clk.

SAN FRANCISCO, CAL.—Reports state that Joseph Haworth and others contemplate remodeling the St. Nicholas Hotel into an opera house at a cost of $50,000.

UKIAH, CAL.—Plans are being prepared for B. Marks for a new opera house, the main part of which will be 60 x 100 ft. Archs., Copeland & Pierce, 126 Kearney St., San Francisco, Cal.

WATER-WORKS.

BANGOR, ME.—J. B. Hunton, Clk., writes us that there will be nothing done in regard to the proposed reservoir this year, except to prepare plans. Supt., M. A. Sinclair.

PORTLAND, ME.—The Rochester Water Co. has been incorporated; capital stock, $100,000, with $300 paid in; Pres., James C. Fox, Portland; Treas., Henry N. Verrill, Portland.

CLAREMONT, N. H.—James L. Rice, Supt. Water-Works, writes us that no important extensions will be made to the works this season.

BOSTON, MASS.—Bids are asked until May 4 for laying about 11,000 ft. of 36-in. cast-iron water pipe in Malden, Melrose and Stoneham, as stated in our advertising columns. Wm. N. Davenport, Secy., Metropolitan Water Bd., 3 Mount Vernon St.

CLINTON, MASS.—O. B. Bates, Supt. Water-Works, writes us that the contract for furnishing and constructing a stand-pipe on Burditt Hill has been awarded to the Ranton Boiler Co., Syracuse, N. Y., at $2,717. No other changes in regard to extending the works have been decided upon by the commissioners. The $15,000 in bonds recently issued is intended for such construction as may be necessary during the year. A. S. Fuller, Registrar, informs us that other stand-pipe bids were: William Allen & Son, Worcester, $2,759; Cunningham Iron Works, South Boston, $2,570; E. Hodge & Co., East Boston, $2,632; Edward Kimball & Son, Cambridgeport, $2,755; Tippett & Wood, Phillipsburg, N. J., $2,939.

FARMINGTON, MASS.—The Farmington River Water Power Co. has petitioned for permission to enlarge its dam for an increase of its water supply.

HOLDEN, MASS.—Charles E. Parker, Chn. Water Com., writes us that at a town meeting held March 15 a majority voted to accept the act to supply the town with water, but not two-thirds vote as required by law. At an adjourned meeting, March 29, an appropriation of $150 was made for the committee to secure data for works. The town has an engineer at work to make surveys. The supply will be taken from Lake Muschapang and will be a gravity line 3½ miles long with 220 ft. fall. Engr., Louis E. Hawes, 751 Tremont Bldg., Boston, Mass.

HOLYOKE, MASS.—The following bids were received by the water commissioners April 16 for laying 52,600 ft. of 20-in. cast-iron water pipe. M. P. Conway, Water Comr.:

P. M. Lynch, Holyoke (awarded contract)	$24,065
Jno. Booth & Co., Winchester, Mass.	27,863
Daniel O'Connell & Son, Holyoke	28,633
McKenzie & Peterson, Springfield, Mass.	29,000
Long & Little, Leominster, Mass.	31,989
P. J. Kennedy, Holyoke	30,295
C. H. Eggles & Co., Boston, Mass.	35,028
H. W. Warner, Northampton, Mass.	38,000
E. Walther & Co., Holyoke	36,194
D. H. Parsons, Westfield, Mass.	48,335

LINCOLN, MASS.—This town has asked for authority to issue $25,000 in bonds for a water supply, according to reports.

MALDEN, MASS.—Geo. W. Barrett, Water Registrar, writes us that the $25,000 appropriated, noted in our issue last week, applies only to ordinary extensions, as petitioned for from time to time.

WINTHROP, MASS.—The voters of this place recently decided to purchase that part of the plant of the Revere Water Co., which is within the limits of the town.

HARTFORD, CONN.—Local papers state that the water commissioners have secured a new water-shed with an area of 18 square miles for the proposed increased water supply for this city.

MIDDLETOWN, CONN.—Henry W. Ayres, C. E., Middlefield, writes us that the town has located the site and made plans for a storage and distributing reservoir at Middlefield. There will be 4½ miles of 20-in. main. Work has been commenced on the dam site and the basin is being cleared of wood, etc. The dam will be of earth, with concrete core wall on rock foundation. Area of basin about 100 acres, depth of water in dam 26 ft., capacity about 280,000,000 gallons. The work will be done under the direction of Geo. H. Bishop and H. W. Ayres. Assistant Engrs., E. M. Peck and G. L. Blakeslee.

BATH, N. Y.—Barney McMimariner, of Bath, is reported to have submitted the lowest bid for constructing a reservoir at the soldier's home, at $2,575. O. H. Smith, Secy.

BUFFALO, N. Y.—R. G. Parsons, Secy. Bd. of Pub. Wks., writes us that no bids were submitted April 15 for completing the construction of the tunnel from the pumping station to the inlet pier begun by A. C. Douglas. It is stated that the work will be readvertised.——The water department will soon ask for bids for furnishing a new 30,000,000-gallon pumping engine and is also planning considerable extensions to the service. Water Commissioners Pankow, Drake and Healey may be addressed.

BUFFALO, N. Y.—Bids are asked until May 6 for completing the tunnel from the pumping station to the inlet pier begun by A. C. Douglas on a contract made July 30, 1895, as stated in our advertising columns. R. G. Parsons, Secy. Bd. Pub. Wks.

CHATHAM, N. Y.—The construction of works by a New York syndicate is reported as proposed.

DE RUYTER, N. Y.—We are informed that the following bids were received April 14 for constructing works, as advertised in Engineering News; Engr., J. F. Witmer, 65 and 66 Chapin Block, Buffalo; Secy., E. N. Coon; complete works with 350 cu. yds. of rock in trenches:

M. B. Birdseye & Son, Fayetteville, N. Y.	$11,695
W. B. Wilson, Buffalo, N. Y.	11,700
Folwell & Finnigan, Lyons, N. Y.	11,728
A. E. Rudiger, Peekskill, N. Y.	11,898
R. B. Lewis & Co., Herkimer, N. Y.	12,198
Edson Bros., Phelps, N. Y.	12,587
Edward H. Post, Wilkesbarre, Pa.	13,615
A. F. Nims, Philadelphia, N. Y.	13,825

Contracts were awarded as follows: Pipe and special castings, Chas. Millar & Son, Utica, N. Y., $17.75 per ton of 2,000 lbs., and 1 9-10 cts. per lb., respectively; hydrants and valves, Ludlow Valve Mfg. Co., Troy, N. Y.; valve boxes, Bingham & Taylor, Buffalo, N. Y., $72 each; pipe laying, reservoir and receiving basin, M. B. Birdseye & Son, Fayetteville, N. Y., $11,695.

LANSINGBURG, N. Y.—C. E. Hicks, Village Engr., writes us that $25,000 has been voted for a new pumping plant of 3,000,000 gallons capacity. Surveys are being made for location of the station and force main line to be 7,000 ft. long.

PITTSFORD, N. Y.—P. D. Carpenter writes us that a vote will be taken May 5 on the question of a water supply from wells. There will be a reservoir but no stand-pipe; estimated cost about $13,000.

ROCHESTER, N. Y.—Emil Kuichling, Ch. Engr. and Supt. Water-Works, writes us that no appropriation for a new reservoir will be made this year, and the acquisition of a site therefor is only being considered. Only $25,000 has been appropriated for extension of the ordinary small mains of the distributing system. No decision has yet been reached as to the streets and size of pipes. Probably no important work will be done on the system this year.

TOTTENVILLE (S. I.), N. Y.—D. C. Butler, Pres. Village, writes us that a vote will be taken within a month on the question of water-works.

TROY, N.Y.—F. J. Molloy, Mayor, writes us that nothing has yet been decided upon in relation to an increased water supply. A conference is to be held at once between the water commissioners and the mayor looking to some action being taken in regard to a better water supply.

YONKERS, N. Y.—J. A. Lockwood, Supt. Water Wks., informs us that the following bids were received April 14 for constructing a tube-well, as advertised in Engineering News:

	Per 1,000,000 gallons.
B. F. Smith, 38 Oliver St., Boston, Mass.	$14,890
Hydraulic Constn. Co., 145 Broadway, N. Y.	9,724
Jos. Edwards & Co., 414 Water St., N. Y.	*9,900
P. H. & J Conlan, 216 Market St., Newark, N. J.	3,750

*For first 1,000,000 gallons; $4,950 for second 1,000,000 gallons.

SPRINGLAKE BEACH, N. J.—The Spring Lake Water Supply Co., has been incorporated to construct works, sewers, etc.; capital stock, $10,000, with all paid in; incorporators, William W. Prout, Levi L. Woolley and Daniel H. Hills, Springlake Beach.

LEBANON, PA.—Press reports state that the council will again ask for bids for building an additional water supply to cost $30,000. Bids were opened March 17 for drilling wells for an increased water supply, as advertised in Engineering News, and the total bids for which were published in our issue of March 25. J. D. Kerr, Secy. Water Comrs.

PHILADELPHIA, PA.—The mayor has approved an ordinance to lay water mains in seven streets and to place meters in the new county prison at Holmesdale.

CENTRE HALL, PA.—It is reported that this place has voted to issue $5,000 in bonds for a new water supply.

BRADDOCK, PA.—Work will begin at once on the proposed reservoir for which $100,000 in bonds were recently voted. L. F. Holzman, Robt. M. Holland and Henry McClure, compose the committee.

PITTSBURG, PA.—Bids are asked until April 24 for furnishing for one year cast iron water pipe, special castings, lead pipe, pig lead, gate valves, hydrants, iron and wood gate boxes, etc., and also for laying about 5,000 ft. of 6 and 8-in. water pipe. Edward M. Bigelow, Dir. Dept. Pub. Wks.——S. C. Young, Secy. and Treas. Edgeworth Water Co., writes us that John Patton, Jr., has been awarded the contract for constructing a reservoir of 300,000 gallons capacity and pipe lines. The works will consist of a triplex pump, a crib at the river, Carlin fire hydrants, 35-HP. Westinghouse gas engine, etc.; estimated cost, about $22,000. Pres., E. P. Young.

SEWICKLEY, PA.—J. P. A. Knox, Clk., writes us that the proposed addition to the works will only be a small reservoir. All labor and materials will be supplied by local concerns.

WESTCHESTER, PA.—Plans and specifications are reported as being prepared for a new pumping station, to cost about $50,000. B. E. Heston, Chn. Com.

FREDERICK, MD.—Bids are asked until April 30 for furnishing 660 tons of 12-in. cast-iron water pipe, as stated in our advertising columns; and also for furnishing 13 tons of pig lead and 1,000 lbs. of yarn. Engrs., Powell & Minshall, 150 Nassau St., New York. S. W. Tyson, Chn. Water Bd.

LAUREL, MD.—Edward Phelps, Mayor, has recommended the supplying of water for fire protection, to cost about $2,480.

BALTIMORE, MD.—C. E. Cunningham, Chn. Com. on Water, 19 North Broadway, writes us that the committee has recommended that a special committee be appointed to investigate a system to purify the water supply for this city.

ELKINS, W. VA.—It is reported that the question of a new water supply for this place is being considered.

LUMBERTON, N. C.—An election, it is reported, will be held April 26 to vote on the question of constructing works. E. K. Procktor, Jr., may be addressed.

WILMINGTON, N. C.—The Excelsior Artesian Well & Sewerage Co. has been incorporated to construct artesian wells to supply this city with water and a sewer system; capital stock, $1,000,000; Treas., William E. Worth; Vice-Pres., George H. Locey; Supt., Chas. H. Leach; Secy. and Treas., F. H. Stedman.

CARTHAGE, N. C.—W. H. McNeill, Secy., writes us that there is a movement in this town to put in works and an electric light plant, but nothing has been done as yet. Parties have now an opportunity to bid on the work.

ABBEVILLE, GA.—We are informed that this place has not yet completed any arrangements for work. Consult Engr., S. K. Felton, Atlanta, Ga.

BAXLEY, GA.—This place voted April 18 to issue bonds for work to cost about $6,000. The town will probably go on and construct the works, plans and specifications having been completed, as noted in our issue of last week. Engr., S. K. Felton, Temple Court, Atlanta, Ga.; J. H. Thomas, Mayor.

FITZGERALD, GA.—We are informed that it is expected to begin work on the proposed works in this place in a few days. These works are owned by a franchise company, in which Sidney Lascelles, Fitzgerald, is interested. The works will cost about $35,000, as noted in our issue of April 8. S. K. Felton, Engr. and Mgr. Southern Water Supply Co., Atlanta, Ga., and Baltimore, Md., prepared the plans.

ATHENS, ALA.—This city, we are informed, is waiting to sell its bonds before beginning the construction of works. It is probable work will be in progress by June 1. Engr., S. K. Felton, Atlanta, Ga. T. C. McClelland, Mayor.

EUTAW, ALA.—Bids were asked until April 20 for constructing works, the supply being from artesian wells. B. B. Barnes, Eutaw, writes us that specifications have been made and the money is on hand to pay cash for constructing a plant. The plant will consist of 10,000 ft. of pipe, two horizontal duplex engines, two steel boilers, stand-pipe, 100 x 12 ft., etc.

WESTPOINT, MISS.—Bids are asked until May 11 for constructing works which will consist of artesian wells, two 50-HP. boilers, two duplex compound pumps of 750-000 gallons capacity, 550 tons of cast-iron water pipe, etc. C. L. Jordan, Mayor.

BROOKHAVEN, MISS.—An election will be held May 10 to vote on the question of issuing $40,000 in bonds for works and an electric light plant, according to reports. Engrs., Sanders & Porter, Louisville, Ky.

HATTIESBURG, MISS.—John F. Schampenois writes us that the supplies for the plant of the Hattiesburg Water Co. have been purchased.

HOLLY SPRINGS, MISS.—Walter G. Kirkpatrick, Nashville, Tenn., and Canton, Miss., has been engaged to prepare plans and specifications for water-works and electric light plant for this place. After plans are prepared an election will be held to vote on the question.

McMINNVILLE, TENN.—Bids are asked until May 18 for constructing water-works and an electric light plant. Engr., J. C. Guild, Chattanooga, Tenn.; J. C. Biles, Chn. Comrs.; D. B. Carson, Secy.

MARTIN, TENN.—Pownall & Minshall, 150 Nassau St., New York, have been engaged to prepare plans and specifications for water-works for this city. The supply is to be from artesian wells; estimated cost, $25,000. An election will be held May 4 to vote on the question of issuing bonds for the works. J. E. Kennedy, Mayor.

FLORENCE, TENN.—Press reports state that an election will be held May 15 to vote on a question of issuing $130,000 in bonds to purchase the water-works. H. B. Lee, R. L. Bliss and A. B. Smith, Bd. of Public Wks.

HAWESVILLE, KY.—We are informed that W. H. Williams Bros. & Co. will be ready for bids in a few days for constructing new works; population, 1,500.

CINCINNATI, O.—The superintendent of water-works has submitted a plan for a stand-pipe at Westwood, to cost $10,000.

GIBSONBURG, O.—F. A. Herman, Clk., writes us that the trustees are drilling wells for a water supply to be completed in about four months. The water will be pumped to a reservoir and stand-pipe. Estimated cost, $28,000. Engr., Benton J. Ashley, Opera House Block, Chicago, Ill.; N. B. Erwin, Pres. Trustees.

LANCASTER, O.—Louis J. Snyder, Secy. and Supt. Water-Works, writes us that the proposed new extensions to the works will consist of three miles of 4 to 14-in. pipe, fire hydrants, valves and a new reservoir.

MASSILLON, O.—Rosser & Coatre, Bellaire, O., have been awarded the contract by I. W. Meyers & Co., who have the general contract for constructing works, for the stand-pipe, pumping machinery and piping system.

WAUSEON, O.—C. E. Guilford writes us that the city has sunk wells for a water supply and is now arranging for an engineer to do the work.

ALBANY, IND.—Press reports state that the question of constructing new works for this city will soon be voted upon.

HOLLAND, MICH.—We are informed that at the election April 5 it was voted to construct extensions and otherwise improve the water-works. The work will consist of 14,975 lbs. of special castings, about 35 hydrants, valves and boxes, etc.; estimated cost, $10,496.

ARMADA, MICH.—The question of constructing works at this place is reported to be under discussion.

BELLEVILLE, ILL.—It is reported that the council has granted the Leschen Deep Well Water Co. an extension of time from April 12 to June 12, in which to spend $15,000 in constructing its proposed works, after which the franchise must be forfeited if the work is not done. Capital stock, $200,000. John A. Day and Joseph Fuess are interested.

DAVENPORT, IA.—Local papers state that the Holly Mfg. Co., Lockport, N. Y., has been awarded the contract to furnish two 5,000,000-gallon pumps. The improvements will cost about $80,000. Supt., J. P. Donahue.

CEDAR FALLS, IA.—Bids are asked by the council for laying a 6-in. water main either across the river on the bridge, or below the bed of the river, according to reports.

KEOSAUQUA, IA.—It is reported that Neil Wiken, of Burlington, Ia., has been awarded the contract for constructing a stand-pipe.

WHAT CHEER, IA.—The question of constructing works is reported as being considered.

ST. LOUIS, MO.—Bids are asked by the board of public improvements until April 27 for constructing eight boilers at the Baden pumping station, and also for furnishing and laying about 17,000 ft. of 6 to 36-in. water pipe, etc.

WHITE SULPHUR SPRINGS, MONT.—A. R. Rhone, Chn. Water Com., writes us that plans and specifications have been prepared and bonds voted for works. It will be a gravity system and will cost about $30,000. The assessed valuation of the town is about $600,000. The city will probably proceed to advertise for bids and complete the system if possible. Des. Engr., F. M. Parker, Great Falls, Mont.

ABILENE, TEX.—N. Werenskiold, Des. and Constr. Engr., P. O. Box 511, Dallas, Tex., writes us that the contract for constructing the Lyttle Creek dam and reservoir for the Lyttle Water Co., has been awarded to J. N. Ingle, of Abilene, and J. F. Dickens, of San Francisco. The dam and reservoir are expected to be completed by the first of June. It will be an earth dam and 30 ft. high at the deepest place, with a 300 ft. spillway. There will be about 3,050 ft. of 12-in. wooden conduit to pumping station. Further extensions and improvements are contemplated.

RICHMOND, TEX.—C. A. Beasley, Pres. Richmond Water-Works Co., writes us that J. F. Weed and B. F. Round, of Houston, Tex., have been awarded a contract for constructing the works at $7,070. The works will consist of a 300,000-gallon pump and boiler, 1½ miles of 4 to 8-in. cast iron pipe, a stand-pipe, 10 x 100 ft., eight double nozzle fire hydrants, eight valves and boxes, etc. Des. Engr., J. F. Weed, Houston.

BLACKHAWK, COLO.—It is reported that the people of this place will soon vote on the question of enlarging the water-works.

MEEKER, COLO.—The question of works is reported as being considered.

PUEBLO, COLO.—The Mountain Water Co. has been incorporated by Whitney Newton, T. W. Robinson, and J. J. Brewster, with a capital stock of $500,000. The source of supply will be from Little Fountain and Rock creeks in El Paso county. It proposes to furnish Pueblo with pure mountain water through a wooden conduit 33½ miles long. An ordinance was read for the first time in the council April 13 granting a franchise to this company.

BANDON, ORE.—The Bandon Light & Water Co. has been incorporated to furnish water and light to this place; capital stock, $5,000; incorporators, Elbert Byer, A. H. Bickingham and others.

PALOUSE, WASH.—Press reports state that the council appointed H. O. Waters, W. J. Breed and Robert Pfaendtner a committee, about April 5, to investigate the question of water-works. It is proposed to construct a tank of 200,000 gallons capacity and sink artesian wells. It is said that the contract for the work will probably be let about May 1.

BERKELEY, CAL.—A. A. Richardson, 1937 Francisco St., Berkeley, and Lincoln, Neb., is testing the land for artesian water for this city and if the test is successful the city will call an election to vote on the question of issuing bonds for works, to cost $260,000. Mr. Richardson has prepared plans for 41 miles of pipe, two pumping engines of 2,000,000 and 3,000,000 gallons capacity respectively, a 10,000,000-gallon reservoir and a 3,000,000-gallon artesian well supply.

RANDSBURG, CAL.—The Randsburg & Desert Springs Water & Light Co. has been incorporated to bring water from Desert Springs five miles from this place. L. H. Owens, of Los Angeles, is said to have been awarded the contract for laying a 5-in. pipe for the works. W. W. Beach, Los Angeles, Cal., is interested.

OAKLAND, CAL.—Bids are being received by the Oakland Water Co. for the construction of a reservoir at West Oakland, of 1,500,000 gallons to cost about $25,000.

SAN FRANCISCO, CAL.—The Blue Mountain Water Co. has been organized with a capital stock of $1,000,000 by P. C. Musgrove, J. Somerville, of West Point, Cal., and H. Hordan, Jr., San Francisco; John T. Smith, Alameda.

CLINTON, ONT.—The question of constructing works is reported as being considered.

IRRIGATION.

CASTLE ROCK, COLO.—Press reports state that Brown Bros., of Denver, and others, are about to revive the project for constructing an irrigation reservoir of about 30,000,000 gallons capacity, at Casa Grand Lake, to cost about $30,000.

GRAND JUNCTION, COLO.—The Grand Valley Irrigation Co. has decided to supply water from its irrigation system to the Keifer extension, which begins near Fruita and extends westward.

GRANT, COLO.—The owners of the Geneva Park reservoir have decided to complete the same as soon as possible. The site of the reservoir is five miles from Cassell's and four miles from this place. Mr. Cunningham is the consulting engineer.

LAMAR, COLO.—The Amity Land & Canal Co. expects to construct two large reservoirs on the Arkansas River, four miles from this town. About 200,000 acres of land will be irrigated; estimated cost of erection, $750,000. Pres., Henry B. Hyde, 120 Broadway, New York, N. Y.

STERLING, COLO.—It is reported that two large reservoirs are soon to be constructed near this place, which will irrigate an area of 150 sq. miles.

CAMARGO, MEX.—Press reports state that the San Juan Irrigation Co. contemplate the construction of an irrigation system for this place. Inigo Noriega and the Maiz Bros. are interested.

SAN DIEGO, CAL.—H. E. Green is reported as preparing plans and specifications for a distributing system on the Scripps Mirawar Canal, Lindavista.

NEW COMPANIES.—West Union Canal Co., Salt Lake City, Utah; $40,000; to own and control the irrigation system of above company and also of the Enterprise Canal Co.; Pres., John E. Booth; Vice-Pres., Wm. D. Lewis; Directors, Stephen I. Bunnell, Jr.; Wm. Varley, James H. Clinger.

SEWERAGE.

BOSTON, MASS.—Bids are asked until April 27 for constructing a brick and pipe sewer, house drains, catch-basins and catch-basin drains in Parker, Norway and Turner Sts., in Roxbury district. Benj. W. Wells, Supt. Sts.

WEBSTER, MASS.—At the town meeting April 9 it was voted to construct a sewer from Carney's corner to the outfall sewer in Peter St., at an estimated cost of about $5,000, and to appropriate $15,000 for constructing the outfall system from the railway bridge near Church Court to the bridge below Chaseville. Leroy J. Upham, Town Clk.

NEW BRITAIN, CONN.—Bids are asked until April 23 for constructing about 7,000 ft. of 10 to 24-in. pipe sewer. G. C. Dunham, Cy. Engr.

COHOES, N. Y.—Reports state that Rudolph Hering, 100 William St., New York city, has been engaged to consult with Edward Hayes, Cy. Engr., upon the plans prepared by the latter for the proposed new sewer system.

JAMAICA (L. I.), N. Y.—Bids are asked until April 24 for constructing drains, with street basins, manholes, etc., bond $10,000; and for macadamizing the village streets, bond $30,000. John J. McLaughlin, Cy. Engr., Bank Bldg.

JAMAICA (L. I.), N. Y.—James F. Gillen, Brooklyn, at $129,806, was the lowest bidder for constructing sewers in this town, as advertised in Engineering News. The other bidders were Herbert Tate, Michael Little and Joseph Lang, of New York; John J. Moloney and Frank W. McNeil, of Brooklyn, and E. Eugene Eaglee, of Flushing.

RANDALL'S ISLAND, N. Y.—A bill has been introduced into the legislature appropriating $37,000 for a sewer system for this island, according to reports.

TOTTENVILLE, (S. I.), N. Y.—D. C. Butler, Village Pres., informs us that the sewer commissioners are having plans prepared for a sewer system. C. M. Winant, Pres. Comn.

EASTON, PA.—Bids are asked until April 28 for constructing a sewer in 10th St., from Northampton to Ferry St., and in 7th St., from Church to Garden St. H. R. Fehr, Cy. Engr.

PHILADELPHIA, PA.—Reports state that sewers will soon be constructed in Beechwood, Emlen, Hansberry, Knox, Logan and Manheim Sts., Germantown.

PITTSBURG, PA.—Bids are asked until April 23 for sewer work at engine house No. 26. J. O. Brown, Dir. Dept. Pub. Safety.

WILMINGTON, DEL.—T. Chalkley Hatton, Cy. Engr., is said to be preparing plans for a new sewer to drain the section of the city west of Scott St. and north of Lancaster Ave. The sewer will probably be built during the summer.

MADISON, FLA.—This city will construct a sewer system, according to reports. Wm. S. Jordan, Chn. Com.

NEW ORLEANS, LA.—The New Orleans Sewer Co. has been organized with John S. Rainey, C. M. Soria, Lucas E. Moore, John Barclay, Stanley O. Thomas, H. D. McCown and Samuel Henderson, Jr., as directors.

LAKELAND, KY.—This town has appropriated $25,000 for a sewer system, according to reports.

CINCINNATI, O.—The Norwood sewerage board has passed a resolution for a system to be constructed in South Norwood at an estimated cost of about $40,000, and another in Ivanhoe and Wayland Aves., to cost about $15,000. H. J. Stanley, Cy. Engr.

SOUTH BEND, IND.—Bids are asked until May 10 for constructing about 2,300 ft. of 81-in. brick, and about 1,400 ft. of 18 to 20-in. pipe sewer, also for about 33,000 sq. yds. of brick paving. Wm. M. Whitten, Cy. Engr.

MAQUOKETA, IA.—C. M. Sanborn, Mayor, writes us that this town is considering the question of constructing a sewer system, but has not arrived at any definite conclusion as yet.

WINONA, MINN.—The sewerage committee has made a report to the council recommending the postponement of the proposed sewer construction on account of the high water and other unfavorable conditions. L. D. Frost, Recorder.

ST. LOUIS, MO.—Anderson Bros., at $91,553, were the lowest bidders for constructing sewers in the district bounded by Garfield and Clemens Aves. and the city limits. B. H. Colby, Sewer Comr.

TOPEKA, KAN.—The board of health has instructed Wm. H. Barnes, Cy. Engr., to prepare plans and specifications for a sewer to drain the territory west of Kansas Ave, and north of the Union Pacific Ry. tracks.

BERKELEY, CAL.—Sewers will be constructed in Berkeley Way and Spaulding Ave., according to reports.

GRASS VALLEY, CAL.—An election will be held May 17 for the purpose of deciding upon the question of establishing a sanitary district and electing a sanitary board with the view of constructing a sewer system.

HOLLISTER, CAL.—J. H. Shaw, Town Clk., informs us that V. T. McCray has prepared plans for a sewer system, and that bids will probably be asked after the bonds are sold, June 7.

SAN FRANCISCO, CAL.—The supervisors have adopted a resolution ordering an 8 to 12-in. sewer constructed in the California and 19th Ave. crossing, a 16-in. pipe sewer in Precita Ave., an 8-in. sewer in 2d and 4th Aves.——Chas. S. Tilton, Cy. Engr., has been authorized to prepare plans for a sewer system for the Ocean View district and in Holly Park, Cortland and North Aves. and Elsie St.——Flinn & Treacy have been awarded the contract for sewering the crossing of 18th and Minnesota Sts.

SAN JOSE, CAL.—The city engineer has been instructed to prepare plans for a sewer system in 12th and Priest Sts. A. G. Bennett, Supt. Sts.

SANTA MONICA, CAL.—A 20-in. pipe sewer is to be constructed along the beach, according to reports.

STOCKTON, CAL.—P. B. McKay was awarded the contract for constructing the Oak St. sewer, at $1,376, and John Craven the contract for the Pilgrim St. sewer, at $1,132.

VENTURA, CAL.—Bids are asked until April 26 for extending the public sewer a distance of about 1,640 ft. J. F. Newby, Town Clk.

NIAGARA FALLS, ONT.—Chas. H. Mitchell, Engr., has sent us a statement of the bids received April 5 for constructing sewers, as advertised in Engineering News. Clark & Connolly, Toronto, were the lowest bidders for sections 3 and 4, at $15,719 and $5,245, respectively, and A. J. Brown, Toronto, the lowest for sections 5, 6, and 7, at $12,141, $11,182 and $4,198, respectively. The other bidders were Barry & Ross, Niagara Falls, Ont.; Bell & Lorenzo, Niagara Falls, Ont.; Clement & Co., Niagara Falls, N. Y.; Newman Bros, St. Catharines, Ont. The engineer's estimates for the five sections were $17,000, $6,400, $15,400, $13,400 and $4,000, respectively. The average cut of each section is about 9½ ft.; earth, generally clay; rock, Niagara limestone.

HAVANA, CUBA.—M. J. Dady writes us regarding his contract for sewer and paving work in Havana, Cuba, that the contract was awarded to him on Sept. 6, 1895, at $11,889,250, and calls for the grading and paving of 72 miles of streets with granite and asphalt, and the laying of 33,773 meters of 6-in., 20,605 meters of 8-in., 27,734 meters of 12-in., 7,310 meters of 15-in., 2,985 meters of 18-in., and 450 meters of 24-in. sewers. There will be all told 50,000 meters of vitrified pipe, and brick sewering and 50,000 meters of cast-iron pipe. Mr. Dady will also erect three large buildings; one will contain a pumping plant capable of handling 150,000,000 gallons of sewage a day. This plant is found necessary because of the tides in the harbor. Connected with this plant there will be a canal 60 ft. wide, 8 ft. deep, and 12,000 meters long. In addition to the ordinary sewers there will be 20,000 meters of storm water sewers and 30,000 meters of subsoil drains, making necessary the excavation of 3,000,000 cu. yds. of earth. The contract calls for the erection of a crematory for the consumption of street refuse, and also the building of a sewage disposal works wherein the sewage will be treated chemically. The work will require the services of about 5,000 men, and is to be begun in November. Mr. Dady has five years to complete his contract. Of the 5,000 men, 500 will be skilled laborers and mechanics, and these will go from this country. The prevailing prices of labor in Havana, are said to be as follows: Ordinary laborers, $1.50; carpenters, $2.50; brick and stone masons, $2.50; steam engineers, $4; machinists, $4.50; pavers, $2; and a cart and mule are hired for $4 a day. This is all in Spanish money.

GARBAGE DISPOSAL—STREET CLEANING.

ELLIS ISLAND, N. Y. H.—Dr. J. H. Senner, U. S. Comr. of Immigration, informs us that the following bids were received April 19 for a garbage crematory on Ellis Island:

Ryan & McFarren, 126 E. 22d St., New York	$300
J. F. Kelly, 116 University Place, New York	395
B. Mullen, 1111 Willow Ave., Hoboken, N. J.	440
Aetna Construction Co., 27 Trinity Place, New York	448
G. Stanton, 119 Worth St., New York	425

ALBANY, N. Y.—Street Commissioner Woolverton is reported by local papers as preparing to secure the removal and disposal of ashes, garbage, etc., for residences, etc. It is estimated that the work can be done for about $100,000 a year.

PHILADELPHIA, PA.—The councils have passed a resolution directing the department of public safety to issue permits for the removal of garbage by contractors from hotels, etc. Selectmen McKain and Clay may be addressed.

ATLANTA, GA.—Bids are asked until May 1 for sweeping the streets and for removing the street sweepings, the night soil, garbage, etc., and also for disposing of same. James F. Alexander, Chn. Bd. of Health.

MEMPHIS, TENN.—P. C. Powers, Comr. of Streets, has recommended the purchase of an additional street sweeper.

TOLEDO, O.—Local papers state that the council has decided to ask for bids for removing and disposing of the garbage. Mayor Major may be addressed.

STREETS AND ROADS.

LACONIA, N. H.—Reports state that this city is considering the purchase of a steam road roller. Wm. I. Nelson, Cy. Engr.

BROOKLYN, N. Y.—Bids are asked until April 29 for paving 21 streets with asphalt; bond, $105,903; and until April 30 for relaying cobblestone pavement on 6 streets; bond, $6,400. Theodore B. Willis, Comr. Cy. Wks.

BROOKLYN, N. Y.—Bids are asked until May 3 for flagging sidewalks in 9 streets. Theodore B. Willis, Comr. Cy. Wks.

JAMAICA (L. I), N. Y.—Bids are asked until April 24 for macadamizing the streets in this village; bond, $30,000; also for constructing drains, with street basins, manholes, etc., bond, $10,000. John J. McLaughlin, Cy. Engr.

NEW YORK, N. Y.—Bids are asked until May 4 for preparing and paving the newly made land in the vicinity of pier 13, North River, with granite or Staten Island syenite blocks, laying crosswalks, and constructing the necessary sewers and appurtenances. Geo. S. Terry, Secy. Dept. Docks, Pier A.

OSWEGO, N. Y.—Bids are asked until May 3 for about 19,263 sq. yds. of asphalt paving in East First and West Second Sts., and about 5,568 sq. yds. of brick paving in West Second St.; bids to be made on Trinidad Pitch Lake, Bermudez or Sicilian and German Rock Asphalt, as stated in our advertising columns. E. A. Cooke, Clk. Dept. Wks.

ROCHESTER, N. Y.—Bids are asked until April 26 for paving State St. with asphalt. Thomas J. Neville, Clk.

TOTTENVILLE (S. I.), N. Y.—D. C. Butler, Village Pres., informs us that several streets will be macadamized by the county under the supervision of the county engineer.

TROY, N. Y.—Reports state that Pine Woods Ave. is to be paved with brick. Martin Schenck, Cy. Engr.

ATLANTIC CITY, N. J.—The council has passed an ordinance for the paving of Pacific Ave., at an estimated cost of $56,000, according to reports. John P. Ashmead, Cy. Engr.

BUTLER, PA.—Peter Schenck has been awarded the contract for paving Washington and North McKean Sts., and Geo. Shaffner the contract for paving South McKean St.; 15 bids were received.

FRANKLIN, PA.—The following bids were received April 15 for about 7,954 sq. yds. of brick paving and about 2,600 ft. of 18 to 24-in. sewer, as noted in our issue of April 8; Wilson & Kuhn, Borough Engrs., Johnstown, Pa.:

Hite & Co., Clearfield, Pa. (accepted)	$13,439
J. E. Spaeth, Pittsburg, Pa.	13,552
Jas. A. March & Co., Hagerstown, Md.	13,619
Sweeney & Houston, Pittsburg, Pa.	13,987
A. W. Purnell, Pittsburg, Pa.	14,105
John Wipond, Hollidaysburg, Pa.	15,068
Kellyaud & Day, McKeesport, Pa.	15,311

MONONGAHELA, PA.—Local papers state that this town will soon vote on the question of issuing bonds for paving purposes. Geo. D. Jenkins, County Engr.

PITTSBURG, PA.—Bids are asked until April 24 for paving in 35 streets. Edward M. Bigelow, Dir. Dept. Pub. Wks.

ATHENS, GA.—College Ave., from Clayton St. to Hancock Ave., will be macadamized, at an estimated cost of about $3,272, according to reports. J. W. Barnett, Cy. Engr.

CLEVELAND, TENN.—Reports state that Bradley county will issue $75,000 in bonds for road improvements.

MEMPHIS, TENN.—Local papers state that P. C. Powers, St. Comr., has recommended to the council considerable grading, graveling, etc., and the purchase of an additional street sweeper.

NASHVILLE, TENN.—Bids are asked until April 27 for furnishing 130,000 granite blocks. J. A. Jowett, Cy. Engr.

LOUISVILLE, KY.—Local papers state that the Breckinridge Asphalt Co. submitted the lowest bids for reconstructing Breckinridge, Kentucky and Floyd Sts., at $22.22, $22.75 and $23.38 per 100 sq. ft., respectively.

LIMA, O.—The council has passed a resolution providing for the paving of Harrison Ave. with brick, according to reports. L. F. Prevost, Cy. Engr.

SOUTH BEND, IND.—Bids are asked until May 10 for about 33,000 sq. yds. of brick paving, and about 2,300 ft. of 81-in. brick and 1,400 ft. of 18 to 20-in. pipe sewer. Wm. M. Whitten, Cy. Engr.

CHICAGO, ILL.—A bill has been introduced in the legislature appointing Geo. H. Hess, Almon Brooks, John G. Shortall, Warren G. Purdy and Laurin H. Turner, a commission with full power to lay out and establish a boulevard in the South Park district of this city, and on Bond, Coles or Lake Aves.——Reports state that the South Park commissioners have decided to pave the Michigan Boulevard with asphalt.——The Bermudez Asphalt Co. has been awarded the contract for asphalting Jackson St., according to reports.

QUINCY, ILL.—Bids are asked until April 24 for improving Jersey and York Sts. L. J. Harris, Secy. Bd. Pub. Wks.

COUNCIL BLUFFS, IA.—Reports state that the county roads are to be improved at an estimated cost of about $14,000. Thos. Tostevin, Cy. Engr.

MINNEAPOLIS, MINN.—Bids are asked until April 30 for about 1,750 sq. yds. of brick paving on the 7th St. bridge. F. W. Capplen, Cy. Engr.; L. A. Lydiard, Cy. Clk.

KANSAS CITY, MO.—The council has passed resolutions providing for paving Tracy Ave., Broadway, 11th, 16th, 17th and 18th Sts., with asphalt; Cherry St., West Prospect Place and a part of 18th and 16th Sts., with brick, and Indiana Ave. with gravel. C. S. Curry, Cy. Clk.

DENVER, COLO.—John Olson has been awarded the contract for the stone flagging for the 14th St. viaduct, at $1.31 a lin. ft., and the Denver Wire & Iron Works, the hand-railing contract at $1.22 a lin. ft. The bids for the asphalt and brick paving and the steel cylinders and the removal of the old viaduct were rejected.——The mayor has signed the ordinance ordering the paving of Colfax Ave., from Broadway to York St. T. J. Milner, Ch. Engr. Bd. Pub. Wks.

TACOMA, WASH.—The Tacoma-Seattle Boulevard Co. has been incorporated with a capital stock of $500,000 to build, maintain and rent private roads or boulevards within this state. E. Irving Halsted, Geo. E. Ames, Percy Sinclair.

BERKELEY, CAL.—Wheeler St. from Prince to Russell St. will be macadamized, according to reports.——The street committee has recommended that part of Harper St. be macadamized.

RIVERSIDE, CAL.—The superintendent of streets has been instructed to macadamize West 8th St. E. C. Sharp, Cy. Engr.

TORONTO, ONT.—Bids are asked until April 28 for paving Grange Ave., from Spadina Ave. to Esther St., with brick, and for sodding Huron St. boulevard, from College St. to Bloor St. R. J. Fleming, Mayor.

HAVANA, CUBA.—M. J. Dady, Brooklyn, N. Y., has been awarded, at $11,889,250, the contract for grading and paving about 72 miles of streets and for extensive sewer work, as described more fully under sewerage.

MANUFACTURING PLANTS.

SHIRLEY, MASS.—The Fredonia mill of the Samson Cordage Co. is reported to have been destroyed by fire last week, causing a loss of about $50,000.

HARTFORD, CONN.—Watson H. Bliss & Sons have been awarded the contract for constructing the new works at Woodbine and Laurel Sts. for the Merrow Machine Co., now on Sheldon St. The new structure will be 100 x 50 ft. and three stories high.

BINGHAMTON, N. Y.—The plant of the Star Chair Mfg. Co. is reported to have been destroyed by fire last week, causing a loss of about $25,000. Pres., W. A. Heath.

BROOKLYN, N. Y.—A fire at the tar and pitch works of the Zoppa Mills, on Wolcott St., is reported to have damaged the machinery, etc., to the extent of about $20,000. The building was owned by the Atlantic Dock Co.

SALAMANCA, N. Y.—Press reports state that Fisher & Genzler's new tannery will be completed before May 15. This will be one of the largest tanneries in the United States, covering as it does over three acres of ground.

CAMDEN, N. J.—We are informed that James H. Lyons, 1608 Wallace St., Philadelphia, Pa., will at once build a pottery in this city for manufacturing plumbers' ware, etc. About 250,000 brick will be used.——Press reports state that plans have been completed by Hales & Ballinger, 1200 Chestnut St., Philadelphia, for a four-story addition, 70 x 35 ft., to the plant of the Esterbrook Pen Co., Camden.

ELIZABETH, N. J.—A fire in the shops of the New York & Brooklyn R. R. Supply & Car Co. April 20, is reported to have done $100,000 worth of damage.

MYERSTOWN, PA.—A manufacturing plant is to be built in this place by W. E. Edgett, $15,000 of the cost of which will be borne by the people of Myerstown.

PITTSBURG, PA.—Work was begun last week on the 160 new coke ovens at the Eliza furnace on Second Ave., owned by Jones & Laughlin. The McClelland Stone Co., Oakland, Pa., has the contract for the stone work.

PLYMOUTH, PA.—Press reports state that the quarries and lime plant of L. K. Graver & Co., Plymouth township, are to be purchased by a Philadelphia and Chicago syndicate. The new owners propose to construct a plant to make magnesia and magnesium sectional pipe covering.

WILMINGTON, DEL.—The Golding Kaolin Co., East Liverpool, O., and Trenton, N. J., is reported to have decided to build a plant in this city, the machinery alone for which, it is said, will cost about $50,000. A pier will also be built.

WELLFORD, S. C.—The Tucapan cotton mills at this place will soon add 5,000 spindles and 100 looms to its plant, bringing the size of the plant beyond 25,000 spindles.

BIRMINGHAM, ALA.—D. Trainer, Secy. and Gen. Mgr., writes us that bids will be received until about April 25 for constructing the Avondale mill and the contract will be let before May 1. Plans and specifications are completed for a four-story cotton mill, 300 x 130 ft., and also a building, 75 x 100 ft., a brick smokestack 228 ft. high, etc. Estimated cost, $60,000. Engrs., W. B. Smith, Whaley & Co., Columbia, S. C.

BELLAIRE, O.—The Standard Boiler & Bridge Co. informs us that it is about to erect a new building and purchase additional machinery, such as air compressors, calking machines, seamers, etc.

DAYTON, O.—The portion of the Globe Iron Works which collapsed April 15 causing a loss of $6,000 will be rebuilt at once.

MERRILLAN, WIS.—It is reported that about $500,000 of capital stock has been subscribed for the erection of the beet sugar factory at Merrillan of the Northwestern Beet Sugar Co. The contract for the work has been awarded to a Cincinnati company, according to reports.

BEAUMONT, TEX.—The board of trade is reported to have received a proposition for a company who wishes to put in a flour mill of 100 bbls. capacity daily.

BEAUMONT, TEX.—L. J. Miller is reported to be preparing to begin the construction of a mattress factory 75x100 ft.

DURANGO, MEX.—Chas. Headen, representing an English syndicate, has secured an option on the iron ore mines at Durango. It is reported that the syndicate proposes to erect an iron foundry and rolling mills.

GAS PLANTS.

PORTLAND, ME.—The Portland Gas Co. is constructing a new gas holder which it is stated will be 73 ft. high.

WAKEFIELD, MASS.—The electric light commissioners have recently been instructed to spend $1,000 of the $3,500 appropriated for its use in the extension of the gas plant.

PITTSBURG, PA.—The Electric Gas Mfg. Co. is endeavoring to secure a franchise to supply gas for heating purposes only. Pres., M. B. Cutter; Secy. and Treas., Maj. J. B. Washington; J. A. Laird and O. D. Thompson are also interested.

ROYERSFORD, PA.—The gas plant of the Spring City Gas Light Co. will be sold on May 1 in order to pay off an indebtedness for about $4,500, according to reports.

JACKSONVILLE, FLA.—The Pintsch Compressing Co. contemplates the erection of a new gas plant in this city to cost about $30,000. William P. St. John, Gen. Agent.

ORANGEVILLE, O.—A company has been organized to develop the oil and gas wells which have recently been discovered in this place.

FORT WAYNE, IND.—The residents in the southeastern portion of this city are desirous of having a gas supply. Frank Alderman is interested in the project.

SIOUX CITY, IA.—The Sioux City Electric Light & Power Co. will erect, at the foot of Court St., a brick gas tank, 100 x 90 ft., with a capacity of 500,000 cu. ft.

MISCELLANEOUS CONTRACTS.

CHEMICAL ENGINE.—Oriskany, N. Y.—The question of purchasing a chemical fire engine is under consideration.

BONDS.—The Dalles, Ore.—Bids are asked until May 15 for the purchase of $20,000 of 5% county bonds. C. L. Phillips, County Treas.

FIRE APPARATUS.—Harrisburg, Pa.—The mayor has recommended the reorganizing of the fire department and the purchase of new apparatus.

BONDS.—Union, S. C.—Bids are asked until May 20 for the purchase of $40,000 of 6% water-works and electric light bonds. F. M. Farr, Chn. Com.

PARK.—Quincy, Ill.—The Park & Boulevard Association is considering plans for a new park of about 70 acres on the Bluff. Pres., E. J. Parker.

DREDGING.—Baltimore, Md.—Bids are reported as being received by the water board for dredging Lake Roland; estimated cost, $50,000. Ch. Engr., N. S. Hill, Jr.

UNDERGROUND WIRES.—Memphis, Tenn.—The question of putting the wires of the Cumberland Telephone & Telegraph Co. under ground is being discussed.

DREDGING.—Detroit, Mich.—Bids are asked until May 7 for dredging, as stated in our advertising columns. Lt.-Col. G. L. Lydecker, U. S. Engrs., Telephone Bldg.

DIGGING.—Brooklyn, N. Y.—Bids are asked until April 26, for digging down a hill on Wallabout Market land, East Side. Surety, $10,000. Theo. B. Willis, Comr.

BONDS.—Pelham Manor, N. Y.—Bids are asked until May 1 for the purchase of $50,000 of 4% gold sewer bonds. John H. Dey, Treas.; F. C. Merry, Pres. Bd. Sewer Comrs.

CANAL.—Ottawa, Ont.—Bids are asked until May 8 for enlarging the Farran's Point Canal; bond, $75,000. J. H. Balderson, Secy. Dept. Rys. and Canals, Ottawa.

PARKS.—Indianapolis, Ind.—Local papers state that the park commissioners have under consideration the question of buying certain sites for parks. Mayor Taggart may be addressed.

FILLING, ETC.—San Francisco, Cal.—The Southern Pacific Ry. Co. is reported as arranging to fill in the Alamada Mole, which will do away with 1½ miles of trestle work. Pres., C. P. Huntington.

DAM.—Phillipston, Mass.—Press reports state that the dam at this place, owned by Henry J. Stone, is in such a bad condition that a new structure will have to be built or the present one greatly repaired.

TELEPHONE.—Woodstock, Va.—The Shenandoah County Telephone Co. has been organized at this place by Col. J. C. Baker, M. B. Wunde and J. H. Graybill. It will at once construct several new lines of telephone.

TUNNEL.—Buffalo, N. Y.—Local papers state that the board of public works has been directed to make plans and estimates for a tunnel under the Buffalo River at Main St. Alderman Franklin may be addressed.

DREDGING.—New York, N. Y.—Bids are asked until May 4 for 3,000 cu. yds. of mud dredging and 2,400 cu. yds. of crib dredging at West 34th St. and the North River. Geo. S. Terry, Secy. Dept. of Docks, Pier A.

BREAKWATER.—Burlington, Vt.—Bids are asked until May 17 for constructing stone superstructure on part of the breakwater at Burlington, as stated in our advertising columns. Maj. W. S. Stanton, U. S. Engr., Oswego, N. Y.

CANAL WORK.—New Orleans, La.—R. B. Benton & Co., 219 Exchange Alley, New Orleans, are reported to have been awarded the contract for constructing 6,300 ft. of canal in Jourdon Ave. T. J. Duggan, Secy. Bd. Levee Comrs.

ARMOR PLATE.—Pittsburg, Pa.—Press reports state that the Carnegie Steel Co. has been invited by the Russian government to bid on contracts for furnishing between 6,000 and 7,000 tons of armor plate for two battleships.

DAM.—Minneapolis, Minn.—Press reports state that the dam at St. Anthony Falls has been so much damaged by high water that it is probable a coffer dam will have to be built. Engr., Wm. de la Barre, St. Anthony Falls Water Power Co.

BRIDGE PAINTING.—New York, N. Y.—Bids are asked by the department of public parks, the Arsenal, Central Park, until April 26 for painting the iron-work of the Washington Bridge, over the Harlem River; security, $5,000. Wm. Leary, Secy.

PIER WORK.—Grand Rapids, Mich.—Bids are asked until May 14 for repairing pier at Portage Lake, Mich., and until May 19 for extending pier at Muskegon Harbor, Mich., as stated in our advertising columns. Capt. C. McD. Townsend, U. S. Engr., 136 Island St., Grand Rapids.

TELEPHONE EXTENSIONS.—Nashville, Tenn.—The Postal Telegraph-Cable Co., 253 Broadway, New York, is reported to have recently appropriated $5,000,000 for extensions to its lines, mainly in the southern states. L. McLaughlin Terrell, Elec. Engr., Atlanta, Ga., may be addressed.

FIRE BOAT AND REPAIRS.—New York, N. Y.—Bids are asked until April 30 for constructing a fire boat and for placing new boilers, etc., in the fire boat "Zophar Mills;" bonds $24,000 and $7,000. Supervising Engr., H. de B. Parsons, 22 William St., New York; Pres. Comrs., J. R. Sheffield, 157 E. 67th St.

DOCK WORK.—Boston, Mass.—The committees on metropolitan affairs and harbors and public lands jointly will report in favor of appropriating $750,000 for state docks. This will include the building of one pier or dock on the Commonwealth lands in South Boston and several piers opposite Jeffrey's Point, at East Boston.

TIMBER.—Bellefonte, Pa.—M. H. Kulp & Co., Shamokin, Pa., are reported to have purchased 26,000 acres of timber land, lying in Center, Clinton, Union and Lycoming counties, about 30 miles east of Bellefonte. It is expected that a railway will be built from Lewisburg at once so that timber may be cut next winter.

REFRIGERATING PLANT.—New York, N. Y.—Bids are asked until May 3 for constructing a refrigerating plant in the aquarium in Castle Garden. The total bids for this work, opened April 12, were published in our issue of last week. The work is to be completed within 50 days from date of contract. Samuel McMillan, Comr. Pub. Parks, the Arsenal, Central Park.

BREAKWATER.—Buffalo, N. Y.—Hughes Bros. & Bangs are on the ground, and will begin work on the new breakwater May 1. Stone for the rubble mound portion will be brought from Lockport at first, on canal boats. These will be towed into the harbor and unloaded as required. A large clam-shell dredge is being built for deep water work while in the shallower parts of the harbor, ordinary dredges will be used.

PARK WORK.—Newark, N. J.—Press reports state as follows: The Essex county park commissioners have instructed the landscape architects of the board to proceed at once upon the preparation of maps and detailed plans for the new north and south parkways. These boulevards have recently been transferred to the control of the Essex county park commission by the action of the township committees of the Oranges, and are the western portions of Park and Central Aves., respectively. The architects are instructed to report as soon as possible on a plan for clearing up and beautifying the land around Eagle Rock.

UNDERGROUND WIRES.—Worcester, Mass.—Local papers state that the overhead light wires will be put in the conduits, now being built, this summer. The Washburn & Moen Mfg. Co., Worcester, has been awarded the contract for furnishing the wire at about $60,000. The conduits complete will cost about $50,000. The entire improvement is estimated to cost about $150,000. Supt., Wm. H. Coughlin; Treas., H. H. Fairbanks.

MINING.—Hillsboro, N. Mex.—It is stated that H. C. Townes and Thos. H. Given, of Pittsburg, Pa.; Wm. Walker, of Allegheny, Pa., and W. S. Hopewell, of Hillsboro, have closed a deal for the purchase of 10,000 acres of placer ground in Sierra county, five miles from here. About $800,000 will be spent in developing the placers and a water pipe 14 miles long will be built from the Las Animas River. Consult. Engr., Wm. Farish, Denver, Colo.

PNEUMATIC TUBE.—Philadelphia, Pa.—The Pneumatic Transit Co., of Philadelphia and New York, which has recently received several contracts from the government, will in a short time begin the construction of one of its underground lines between the post office and the Reading Terminal and the Broad St. station. It is to be completed by July 1. An 8-in. tube is to be laid from the post office building out Chant St. to 10th, thence to Filbert, and out Filbert to 15th, passing the Reading Terminal on the way. The contract price for the service is $23,300 a year. The purpose of the new extension is to do away, in a large measure, with the mail wagon service between the railway stations and the post office.

JETTIES.—Asbury Park, N. J.—Press reports state as follows: J. H. Bradley has decided to construct new jetties and a breakwater at Asbury Ave. and the fishing pier. The sea at every high tide batters the boardwalk at these points. The jetty system of protecting the beach front has worked satisfactorily at Ocean Grove. At Bay Head, south of this place, four new jetties are being built under the supervision of Prof. Walter P. Harris, of Princeton University, the inventor of the system to be used here by Mr. Bradley. These jetties are 400 ft. apart and 150 ft. long. The sea made such inroads on the beach front at Bay Head that nine buildings had to be moved, but after the first jetty was put in the beach began to make very speedily.

ROCK CRUSHER.—Oroville, Cal.—Ed. Harkness, Clk., writes us that the following bids were received April 7 for furnishing the board of supervisors a rock crushing plant, as noted in Engineering News March 18; contract will not be awarded until May meeting:

Bidder.	R'ck crusher, 9x15.	Elevator.	Screen.	Roller, 5 tons.	Complete.
James Porteous, Fresno, Cal..	....	....	....	$600	.....
W. S. Godwin & Co., Phila...	$600	....	....	....	.....
" " " ..	900	....	....	....	.....
J. Hendy M. Wks., S.Francisco	....	....	....	....	$1,575
Gates Iron Works., Chicago..	700	$6 a ft	$125	$500	.....
" " " ..	800	"	125	500	.....
L. E. Hoyt & Co., Walton, N.Y.:					
No. 1.	475	125	120	....	.....
No. 2.	650	125	120	....	.....
Pelton Water-Wheel Co., San Francisco, Cal., Plan A...	....	....	....	....	2,060
Plan B	....	....	....	....	2,650
Plan C	....	....	....	....	2,460
Henshaw, Bulkley & Belcher, San Francisco, Cal.	1,050	150	187	510	1,897
J. W. Turner, S.Francisco, No.1	525	126	125	450	1,226
No. 2	675	160	125	450	1,410

CONTRACT PRICES.

BRICK PAVING.—Waukesha, Wis.—Wm. Powrie, Cy. Engr., opened the following bids April 12 for paving Grand Ave., from Broadway to the railway tracks, as advertised in Engineering News; contract awarded to Cape & Cahill, and Galesburg Paving Brick Co.'s brick selected; foundation is 6 ins. concrete:

Bids Received at Waukesha, Wis., April 12, for Brick Paving.

Bidder.	Excavation, 4,100 cu. yds.	Galesburg* brick, 7,400 sq. yds.	Clinton* brick.	Springfield* brick.	Boston block.	Clinton block.	Curb stone, 4x30 ins., 3,000 lin. ft.	Prot. curb set, 650 lin. ft.	Curb reset, 1,100 lin. ft.	Barr Clay Co.	Barr Clay Co. block.	Purington Pvg. Galesburg.	Zanesville* block.	Total.
Cape & Cahill, Racine, Wis.....	$0.23	$1.26	$1.24	$1.26	$1.30	$1.24	$0.39	$0.26	$0.09	....	....	....	....	$11,705
J. H. Greene & Son, Appleton...	.27	1.33	1.36	1.365	1.385	...	.42	.22	.13	$1.3458	1.36	....	....	12,495
Hackworthy Constn Co., Appleton.	.25	1.45	1.46	1.47	1.49	1.457	.39	.25	.07	1.45	1.46	$1.46	....	13,184
J. O. Donnell, Milwaukee, Wis...	.25	1.52	...	...	...	...	.42	.20	.10	1.50	1.51	1.61	$1.585	13,793
John O. Jones, Racine, Wis.....	.20	1.38	1.40	1.40	1.42	1.40	.39	.25	.08	1.37	1.39	...	...	12,453
N. F. Reichert Co., Racine, Wis..	.25	1.27	1.345	1.40	1.40	1.39	.40	.28	.10	...	1.35	...	...	11,935
Chas. Forestal, Milwaukee, Wis..	.27	1.225	1.225	...	...	1.225	.32	.23	.10	1.225	1.225	1.225	1.225	11,392
Thatcher & Wilson, Chicago, Ill..	.19	1.27	1.27	...	...	...	.44	.23	...	1.27	...	...	...	11,647
A. B. Adlow, Milwaukee, Wis....	.205	1.29	1.29	...	...	1.29	.43	.29	.12	1.29	1.29	1.29	1.29	12,366
Vogt Const'n Co., Milwaukee, Wis.	.27	1.42	...	...	...	1.45	.40	.22	.09	1.45	...	...	1.45	13,057
Chas. L. Kinney, Elkhart, Ind...	.28	1.435	1.41	...	1.455	...	.44	.24	.12	1.43	...	...	...	13,375
Michael Gleason, Waukesha, Wis..	.29	1.45	1.42	...	1.47	...	.45	.25	.13	1.44	...	1.45	...	13,575
August Dieman, Waukesha, Wis..	.185	1.32	1.31	1.38	1.44	1.31	.38	.18	.08	1.31	1.31	1.33	...	11,872
Nick Forestal, Milwaukee, Wis...	.28	1.42	...	...	...	...	.36	.32	.10	...	...	...	...	13,095

*Repressed.

GRADING, ETC.—New York, N. Y.—The following bids were opened April 14 for regulating, grading, setting curbstones, flagging the sidewalks, laying crosswalks, building approaches and placing fences in Marcher Ave., from Jerome Ave. to Featherbed Lane:

Quantities.	Martin Linps, 2634 3d Ave.	Jos. A. Quinn.	Thielmann & Smith, 147 E. 125th St.	W. J. Murray, 46 W. 135th St.
Earth excavation .. 6,800 cu. yds.	$0.10	$0.25	.....	$0.64
Rock excavation ... 5,600 " "	.90	1.25	.....	.64
Filling .....15,500 " "	.35	.25	$0.69	.10
New curb ..... 8,100 lin. ft..	.55	.45	.48	.69
Flagging .....32,400 sq. ft..	.18	.18	.20	.15
Broken stone ..... 2,900 " "	.50	.40	.45	.40
Dry rub'l masonry. 350 cu. yds.	1.50	1.50	3.00	2.00
Lumber ..... 1,000 ft. B.M.	20.00	15.00	...	.01
New fence ..... 2,250 lin. ft..	.20	.40	.45	.30
Gutters, 4 ft. wide. 8,250 " "	.20	.10	.15	.10

SPECIAL CASTINGS.—Minneapolis, Minn.—The Gillette-Herzog Mfg. Co. has been awarded the contract for furnishing special castings to be used by the water-works department during 1897, at $30 per net ton. F. W. Cappelen, Cy. Engr.; Ellis R. Dutton, St. Engr.

ASPHALT PAVING.—Brooklyn, N. Y.—N. P. Lewis, Engr. Street Construction and Maintenance, has sent us the following statement of the bids opened April 15 for asphalt paving:

Quantities.	Fruin-Bambrick Co.	Cranford & Co.	Eastern Bermudez Co.
Rodney-St., Lee to Marcy Ave.:			
Asphalt .....2,615 sq. yds.	$1.29	$0.97	$0.90
New curb .....1,150 lin. ft..	.70	.70	.70
Old curb ..... 150 " "	.30	.30	.30
Concrete ..... 497 cu. yds.	4.80	3.80	4.00
Flagging ..... 400 sq. ft..	.05	.05	.05
Total	$6,629	$5,295	$5,212
Jefferson Ave., Reid to Patchen Ave.:			
Asphalt .....3,008 sq. yds.	$1.39	$0.97	$0.90
New curb .....1,310 lin. ft..	.70	.70	.70
Old curb ..... 300 " "	.30	.30	.30
Concrete ..... 576 cu. yds.	5.25	4.20	4.00
Flagging ..... 200 sq. ft..	.05	.05	.05
Total	$8,222	$6,354	$6,028
Downing St., Gates to Putnam Ave.:			
Asphalt .....2,607 sq. yds.	$1.39	$0.97	$0.90
New curb .....1,510 lin. ft..	.70	.70	.70
Old curb ..... 43 " "	.30	.30	.30
Concrete ..... 507 cu. yds.	5.25	3.80	4.00
Flagging ..... 200 sq. ft..	.05	.05	.05
Total	$7,365	$5,535	$5,454
Wilson St., Wythe to Bedford Ave.:			
Asphalt .....2,286 sq. yds.	$1.29	$0.97	$0.90
New curb .....1,100 lin. ft..	.70	.70	.70
Old curb ..... 135 " "	.30	.30	.30
Concrete ..... 439 cu. yds.	4.80	3.80	4.00
Flagging ..... 400 sq. ft..	.05	.05	.05
Total	$5,887	$4,716	$4,644
Decatur St., Stuyvesant to Reid Ave.:			
Asphalt .....2,926 sq. yds.	...	$0.97	$0.90
New curb .....1,350 lin. ft..	...	.70	.70
Old curb ..... 250 " "	...	.30	.30
Concrete ..... 563 cu. yds.	...	3.80	4.00
Flagging ..... 200 sq. ft..	...	.05	.05
Total	.....	$6,008	$5,915
Ocean Ave., intersection of Flatbush Ave.:			
Asphalt .....1,800 sq. yds.	...	$1.05	$1.60
New curb ..... 100 lin. ft..	...	.70	.70
Old curb ..... 185 " "	...	.30	.30
Concrete ..... 300 cu. yds.	...	4.30	4.50
Flagging	...	.05	...
Total	.....	$3,306	$4,356
Bedford Ave., St. Marks Ave. to Butler St.:			
Asphalt .....4,955 sq. yds.	...	$1.05	$1.06
New curb ..... 490 lin. ft..	...	.70	.70
Old curb .....1,500 " "	...	.30	.30
Concrete ..... 75 cu. yds.	...	1.50	1.50
Flagging ..... 500 sq. ft..	...	.05	.05
Total	.....	$6,133	$6,183

VITRIFIED BRICK AND INVERT BLOCKS.—Baltimore, Md.—The following bids were opened by Wm. Hanway, Cy. Comr., April 15 for furnishing and delivering on site of sewer about 25,000 vitrified brick, and 762 lin. ft. of vitrified invert blocks, for repairs to a sewer; all brick to be wire cut, 8½ to 9 ins. long, 4 to 4¼ ins. deep, 2½ ins. wide, free from imperfections, etc.; invert blocks to be of terra cotta, shape and dimensions as shown on drawings:

Bidder.	Brick, per 1,000.	Blocks, per lin. ft.
W. E. Anderson, Baltimore, Md.	$18.70	.....
Baltimore Retort & Fire Brick Co...	17.00	$0.45
J. A. Hayden, Frederick City.....	17.50	.....
D. M. Rittenhouse, Baltimore.....	19.00	.....
Mut'l Bldg Supply Co., Baltimore,	$18.50	18.90
B. Wallis & Co., Baltimore.....	18.50	1.00
W. W. Clarke & Son, Balt. (informal)	11.00	.....

WATER-WORKS SUPPLIES.—Cincinnati, O.—The lowest bids opened April 9 by the board of administration for the year's supply of machine castings, water pipe, etc., for the water-works department are reported in local papers as follows: For machine castings, Hoefinghoff & Laue Co., at 1¼ cts. a lb. for grate bars and fire liners; 1.55 cts. for repair work in pump department; 1.6 cts. for repair work in street department; 1.6 cts. for valves, and 2¼ cts. for loam castings; for water pipes, etc., the Anniston Pipe & Foundry Co., pipe, $15.94 a ton; special castings, $35; loam castings, $40.

BRICK PAVING.—Canton, O.—L. E. Chapin, Cy. Engr., opened the following bids April 12 for paving East 10th St.; all local bidders:

Bidder.	Filler.	Standard wire cut —brick.— Per yd.	Aprox. total.	Wire cut —block.— Per yd.	Aprox. total.
Miday & Melbourne..	Tar.	$0.98	$6,136	$1.04	$6,458
" " "	..Cement.	.93	5,867	.99	6,189
John Duffy	Tar.	1.11	6,243	1.10	6,689
" "	Cement.	1.03	6,313	1.02	6,259
Dager & McKinney...	Tar.	.92	5,945	.91	5,892
" " ...	Cement.	.92	5,945	.91	5,892
Harry Corl	Tar.	1.05	6,440	1.05	6,440
" "	Cement.	.96	5,956	.96	5,956
Rich'd Stanton	Tar.	1.00	6,280	1.04	6,496
" "	Cement.	1.01	6,334	1.00	6,280
Wm. Hadley	Tar.	1.10	6,798	1.15	7,067
" "	Cement.	1.05	6,529	1.10	6,798

THE ACME POWDER CO.,
MANUFACTURERS OF EXPLOSIVES,
606 DUQUESNE WAY, PITTSBURG, PA.

EXPLOSIVES

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PITTSBURG, PA.
Powder, Dynamite, Rock Drills, Air Compressors, Rock Breakers, Safety Fuses, Electric Batteries, Miners' Squibs.

Chimney Tops. KENNEDY-KLING & CO. SEWER PIPE. 150 FRANKSTOWN AVE PITTSBURG, PA. Fire Linings.

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No. 120 Liberty Street.

COUNTY COURT HOUSE.

NOTICE TO CONTRACTORS.

FORT WAYNE, IND.

Notice is hereby given, that sealed proposals will be received by the Board of Commissioners of the County of Allen, Indiana, at Fort Wayne, up to the hour of 2 o'clock p. m., on the 15th day of May, 1897, for furnishing all of the material and doing all the work, including the cartage, tools, tackle and everything requisite for the building of the Court House, Power Station and Tunnel, according to the plans and specifications therefor, prepared by Mr. Brentwood S. Tolan, Architect, which have been adopted by the said Board of Commissioners, and are now deposited and on file in the office of the Auditor of said County.

Copies of said plans and specifications can be found at the offices of Brentwood S. Tolan, Architect, Fort Wayne, Indiana; Pierce & Richardson, Chicago, Illinois, who are Consulting, Electrical and Mechanical Engineers for the Architect; and the Engineering News, New York City.

Copies of full legal notices and blank forms of proposals and of bonds, will be furnished by the Auditor of said County upon request, and all proposals and bonds must be on the form so furnished, and in accordance therewith.

For the building of the Court House, and the doing of the general work included therewith, a bond in the sum of Two Hundred Thousand Dollars ($200,000) will be required.

The right to reject any and all bids is reserved.

By order of the Board of Commissioners of the County of Allen.

M. A. FERGUSON,
J. H. STELLHORN,
S. F. BAKER,
County Commissioners.

Attest:
C. W. EDSALL,
Auditor Allen County, Ind.
Fort Wayne, Indiana, March 31, 1897. 14-4t

WATER MAIN.

KEARNEY, N. J.

Sealed proposals will be received by the Board of Township Committee of the Township of Kearney, at the Township Hall, on April 27, 1897, at 9 p. m. for the furnishing and laying of Twelve Thousand (12,000) feet of Water Main, according to plans and specifications prepared by the Township Surveyor and on file in the office of the Township Clerk.

Each proposal must be accompanied by a certified check for five (5) per cent. of the amount of the proposal.

The Board of Township Committee reserves the right to reject any or all bids.

By order of the Board.
BURTON E. CANFIELD,
Township Clerk.
Kearney, N. J., April 9, 1897. 15-2t.

Proposals for a Supply of Pure, Wholesome and Potable Water.

HOBOKEN, N. J.

Sealed proposals will be received at the office of the Board of Water Commissioners of the City of Hoboken, N. J., on Friday, the 30th day of April, A. D. 1897, at 8 o'clock p. m. for a supply of pure, wholesome and potable water for the term of fifteen, twenty and twenty-five years respectively from the 1st day of November, A. D. 1898, in accordance with certain resolutions passed by the Board of Water Commissioners on the 8th day of April, 1897, a copy of which may be obtained upon application at the office of the Water Register in the City Hall in the City of Hoboken. Said proposals may also contain an option for the acquiring by the city of the land, water and water rights for such supply after five, ten, fifteen or twenty years.

Each bidder must accompany his proposal with a certified check for $50,000 drawn upon a national bank, payable to the Board of Water Commissioners of the City of Hoboken. Proposals must be enclosed in sealed envelopes, endorsed "Proposals for a supply of water for the City of Hoboken, N. J." directed to the Board of Water Commissioners of the City of Hoboken, N. J., and handed to the Register of said Board, in open meeting, when called for.

The successful bidder shall also furnish a bond, as required by said resolutions, in the sum of $250,000 upon the execution of the contract with two or more sufficient, individual sureties residing in Hudson County, or with an approved Surety Company, conditioned for the faithful performance of said contract. Said bond to be renewed every five years during the term of said contract, and to be approved as to form by the Counsel of the Board of Water Commissioners and as to the sufficiency of the sureties by the Board of Water Commissioners of the City of Hoboken. The Board, according to the terms of the resolutions, reserve the right to reject any and all proposals, if deemed for the best interest of the city so to do.

By order of the Board of Water Commissioners. HENRY LOHMANN, JR.,
Water Register.
Hoboken, N. J., April 9, 1897. 15-3t.

BRICK PAVING.

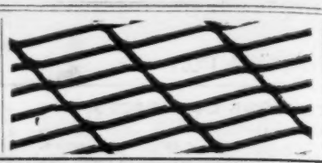
BRADFORD, PA., April 9, 1897.

Sealed proposals will be received by the undersigned at Bradford, Pa., up to 5 o'clock p. m. Monday, May 3, 1897, for paving with vitrified brick 3 streets, in all about 18,000 square yards. $300 certified check must accompany each bid. For specifications write Peyton B. Winfree, City Engineer.

JAS. A. LINDSEY,
15-2t. City Clerk.

U. S. ENGINEER OFFICE, 537 Congress St., Portland, Me., March 22, 1897.—Sealed proposals for DREDGING Portland Harbor, Me., including Back Cove, will be received here until 3 p. m., April 29, 1897, and then publicly opened. Information furnished on application. A. N. DAMRELL, Lieut.-Col., Engrs. 15-2t.

EXPANDED METAL.
PITTSBURGH, 531 Wood Street.
NEW YORK, 256 Broadway.



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For Plastering, Fireproofing, Beams, Columns, Partitions, etc.

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Manufacturers and Contractors for Erection of Hollow Tile and Porous Terra Cotta . . **FIREPROOFING**
No. 874 BROADWAY, NEW YORK. Henry M. Keasbey, President.

GALESBURG VITRIFIED BRICK CO.,
Paving Brick Exclusively. GALESBURG, ILL.

MUNICIPALITIES
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T. W. KINSER & SONS,
609-613 Chicago Stock Exchange, Chicago.
SPECIALTIES: Sewers, Water-Works, Paving Railroads, Fills, Excavating and Masonry.

THE T. A. GILLESPIE COMPANY,
Engineers and Contractors.
Manufacturers of
RIVETED STEEL PIPE.
Pittsburg Office: Westinghouse Bldg.
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CONTRACTORS who can take FIRST-CLASS MUNICIPAL BONDS in South and West in payment, and put in WATER-WORKS and ELECTRIC LIGHT Plants, will find it to their interest to correspond with me. I make a specialty of this line. R. B. HALLIGAN, Suite 901, 155 LaSalle St., Chicago.

UTICA PIPE FOUNDRY CO.

CHARLES MILLAR & SON, Selling Agents, UTICA, N. Y.
Cast Iron Pipe and Specials, Hydrants, Gates, Pig Lead, etc. AKRON SEWER PIPE. Lead Pipe, Plumbers' Materials.

NATIONAL HOTEL,
Cor. 6th St. and Pennsylvania Avenue,
Washington, D. C.
Under new management, and entirely renovated from top to bottom. Steam heat, electric lights and new plumbing throughout. Opposite Pennsylvania Depot. Special attention paid to commercial travelers.
Rates: American plan, $2.50 per day up.
European plan, $1.00 per day up.
WALTER BURTON, Manager. O. G. STAPLES, Proprietor.

BRICK PAVING.

EASTON, PA.

Sealed proposals will be received until 7:30 p. m. Thursday, April 29, 1897, by the undersigned, for the City of Easton, Pa., at the office of the City Engineer, Municipal Building, for the paving of that portion of Centre Square south of the north building line of Northampton St.; Washington St., from Tenth to Eleventh St.; and Fourth St., from Northampton to Church St., with vitrified paving brick, on a six-inch concrete base, in accordance with the plans and specifications on file in the office of the City Engineer.

Samples of brick and sand, properly labeled, must be submitted on or before April 28, 1897.

Contractors will bid separately on each street and enclose the same and certified check in one envelope, marked "Proposals for Street Paving."

Each proposal must be made upon the "form" furnished by the City Engineer.

No bid will be considered unless accompanied by a certified check drawn to the order of the Treasurer of Easton, Pa., or New York draft to the amount of $500. All such deposits, except that of the successful bidder, will be returned to the person making the same within ten days after the contract is awarded. If the successful bidder shall refuse or neglect, within ten days after notice that the contract has been awarded, to execute the same and furnish a bond acceptable to a joint convention of Councils in the sum of one-half of the amount of contract, the amount of deposit made by him shall be forfeited to and retained by the City of Easton as liquidated damages for such neglect or refusal; but if he shall execute the contract within the time aforesaid, the amount of his deposit shall be returned to him.

Specifications, blank forms, and all available information will be furnished on application to this office.

The city reserves the right to reject any or all bids. H. R. FEHR,
15-2t City Engineer.

U. S. ENGINEER OFFICE, 1637 Indiana Ave., Chicago, Ill., April 8, 1897.—Sealed proposals in triplicate for constructing eight miles or less of Eastern Section of ILLINOIS AND MISSISSIPPI CANAL, between Mile 8 and Mile 16, near Tiskilwa, Ill., for EXCAVATING LOCK PITS and CONSTRUCTING FOUNDATIONS for TWO AQUEDUCTS and ELEVEN LOCKS and for CONSTRUCTING TWO CONCRETE ARCH CULVERTS and SIX CAST IRON PIPE CULVERTS will be received here until 12 noon, central time, June 3, 1897, and then publicly opened. Information furnished on application here, or to Assistant Engineer, James C. Long, Tiskilwa, Ill. W. L. MARSHALL, Major, Engrs. 15-4t.

Other Proposals, Pages XXIV & XXVI.

ESTABLISHED 1820
WALDO BROTHERS,
BOSTON, MASS.
ROSENDALE AND PORTLAND CEMENTS.
CONTRACTORS' MASON'S SUPPLIES.
Largest Stock in N.E.
SEND FOR CATALOGUE
N.E. AGTS. AKRON SEWER PIPE

WATER-WORKS.

OFFICE OF VILLAGE CLERK,
MEDINA, OHIO, March 30, 1897.

Sealed proposals will be received by the Council of the Village of Medina, at the office of the Clerk of said village until 12 o'clock noon, on Saturday, the 30th day of April, 1897, for furnishing the necessary material, machinery, etc., to erect and install the following:

One Steel Stand-Pipe, 14 × 90 ft.
One Building for Pumping Station.
One deep well pumping Engine, with Boiler, Heater, etc., etc.
990 ft. (approx.) 8-in. pipe, laid.
870 ft. (") 6-in. pipe, laid.
6 (") Fire Hydrants.
4 (") Gate Valves and Boxes.

Demolition of Old Pumping Station;

all in accordance with the plans and specifications now on file in the office of the Clerk of said village and the office of the Engineer in Chicago.

Each bid must be accompanied by a certified check on some bank in the village of Medina, in the sum of Five Hundred Dollars ($500.00).

Bidders must use the printed forms furnished by the Village Clerk, as none others will be received.

The Council reserves the right to reject any or all bids. N. H. McCLURE, Mayor.
HIRAM GOODWIN, Clerk.
BURTON J. ASHLEY, Engineer,
15-2t 511 Opera House Bldg., Chicago.

BRIDGE SPANS.

BOSTON TRANSIT COMMISSION. CHARLESTOWN BRIDGE.—Sealed bids for building eight spans of STEEL SUPERSTRUCTURE for CHARLESTOWN BRIDGE will be received by the Boston Transit Commission at its office, 20 Beacon St., Boston, Mass., until 12 o'clock m., of Wednesday, April 28, 1897, and at that time and place will be publicly opened and read. No bid will be received and deposited unless accompanied by a properly certified check for the sum of Five Thousand Dollars, payable to the order of the Treasurer of the City of Boston, which check will be returned to the bidder unless he fails to execute the contract should it be awarded to him. Notice to contractors—Bid, contract, specifications and bond can be obtained, and plans can be seen at the office of the City Engineer, City Hall, Boston. The Commission reserves the right to reject any and all bids. GEORGE G. CROCKER, Chairman; CHARLES H. DALTON, THOMAS J. GARGAN, GEORGE F. SWAIN, HORACE G. ALLEN, Boston Transit Commission; B. LEIGHTON BEAL, Secretary.
April 15, 1897. 15-2t.

U. S. ENGINEER OFFICE, 601 18th St., N. W., Washington, D. C., April 10, 1897.—Sealed proposals for reconstruction of PIER NO. 4 OF AQUEDUCT BRIDGE across Potomac River at Georgetown, D. C., will be received here until 12 m., April 30, 1897, and then publicly opened. Information furnished on application. CHAS. J. ALLEN, Lieut.-Col., Engrs. 15-2t.

ROCK EXCAVATION.—Portland, Ore.—Capt. W. L. Fisk, U. S. Engrs., opened the following bids April 12 for 500 cu. yds. of rock excavation in Umpqua River, Ore., as advertised in Engineering News:

Bidder.	Per cu. yd.	Total.
Normile & Fastabend, Astoria, Ore.	$8.00	$4,000
Joseph Paquet, Portland, Ore.	18.00	9,000
G. O. Nolan, Tillamook, Ore.	20.00	10,000
Noble & Saunders, Marshfield, Ore.	9.25	4,625
Chas. A. Gray, Salem, Ore.	9.24	4,620
Perry Hinkle, Portland, Ore.	10.95	5,475

DIKE WORK, ETC.—Portland, Ore.—Capt. W. L. Fisk, U. S. Engrs., opened the following bids April 12 for dredging, constructing dikes, etc., in Coquille River, Ore., as advertised in Engineering News:

Bids for Dredging, Constructing Dikes, Etc., in Coquille River, Oregon.

Quantities.		Wakefield & Jacobsen, Portland.	Noble & Saunders, Marshfield.	G. O. Nolan, Tillamook.	Joseph Paquet, Portland.	Charles A. Gray, Salem.
Piles	35,000 lin. ft.	$0.11	$0.12½	$0.20	$0.09½	$0.09½
Lumber	30,000 ft. B.M.	12.00	12.50	10.00	8.50	14.49
Spikes	3,000 lbs.	.03½	.07½	.01	.04	.09½
Brush	2,100 cords	2.35	2.25	1.00	2.20	1.49
Wire	3,000 lbs.	.04	.07½	.01	.03½	.18
Stone	2,000 tons	.75	1.00	.75	.60	1.04
Sand bags	7,000	.13	.12	.10	.15	.14½
Excavation, sand	5,500 cu. yds.	.35	.10	.40	.31	.29
Excavation, gravel	3,200 " "	.55	.15	.50	.36	.34
Snagging plant, per day	20 days	40.00	25.00	10.00	60.00	199.00
Total		$16,265	$14,295	$15,660	$14,732	$17,471

BRICK PAVING.—Albany, N. Y.—The following bids were received for repaving Hawk St. viaduct:

Quantities.		T. Henry Dumary.	Pat. W. Mulderry.	P. H. Reiley.
Brick paving	1,538 sq. yds.	$1.50	$1.40	$1.55
Brick on concrete	233 " "	2.00	1.95	1.89
Relyg gran on con	323 " "	.40	1.44	1.28
Credit				
Wooden block pavement		132.00	93.00	88.60
Old granite blocks		233.00	209.70	186.40
Total cost		$2,537	$3,831	$2,655

RESERVOIR.—Pittsburg, Pa.—Frans Engstrom, Asst. Engr., has sent us the following statements of the bids received by the department of public works April 6 for constructing Highland reservoir No. 2; capacity, 125,000,000 gallons; the total bids were published April 15 under Water-Works:

Bids Received at Pittsburg, Pa., April 6, 1897, for Constructing Highland Reservoir No. 2.

Quantities.		Engineer's estimate.	Jonathan Clark & Sons Co., Chicago.	McArthur Bro's. Co., Chicago.	Werneberg, Sheehan & Co., New York.	T. A. Gillespie Co., Pittsburg.	Booth & Flinn, Ltd, Pittsburg.	Geo. T. Richards, Pittsburg.	James H. McQuade, Pittsburg.	Sloan, McIlvain & Ott Bros., Pittsb'g.	James Stewart Co., St. Louis.	J.C.McSpadden, Pittsburg.	T. McNally & Co., Pittsburg.	Jos. Gianini & Co., Pittsburg.	C.I.& A. W. McDonald, Pittsburg.	George F. Egan, Pittsburg.
Grubbing and clearing	*24 acres	$600.00	$2500.00	$100.00	$1320.00	$250.00	$200.00	$2400.00	$720.00	$150.00	$800.00	$1200.00	$600.00	$50.00	$500.00	$750.00
Excavation	470,000 cu. yds.	.38	.28	.24	.45	.28	.31	.35	.34	.35	.345	.38	.34	.375	.43	.47
Trenching	12,000 " "	.35	.40	.35	.40	.20	.31	.35	.34	.30	.45	.28	.40	.30	.50	.315
Puddle	54,000 " "	1.35	.80	.65	.50	1.35	1.68	1.35	1.33	1.35	1.35	1.48	1.45	1.34	1.15	1.775
Soiling and sodding	31,000 sq. "	.32	.21	.22	.15	.25	.13	.40	.30	.25	.25	.30	.20	.40	.40	.375
Portl'd cement conc'te	2,540 cu. yds.	6.75	5.50	8.00	6.00	6.50	6.66	7.00	6.35	8.50	7.70	7.00	7.48	7.50	8.35	6.90
Nat. cement concrete	250 " "	4.75	5.00	6.00	4.50	4.50	7.00	6.00	4.15	6.00	3.60	6.00	5.10	6.00	6.50	5.488
Stone masonry	1,350 " "	16.00	18.00	15.50	15.50	13.00	12.50	15.00	12.25	18.00	18.00	16.00	15.00	12.00	11.50	17.38
Granite masonry	8 " "	60.00	60.00	50.00	50.00	60.00	38.00	100.00	31.00	50.00	48.00	30.00	54.00	60.00	25.00	60.625
Brick masonry	180 " "	10.00	7.00	8.00	6.50	6.00	9.00	12.00	7.35	8.50	8.80	12.00	7.50	9.00	8.00	8.663
Coping	530 " "	15.00	22.00	17.50	15.00	15.00	14.50	25.00	14.25	20.00	20.40	14.00	16.20	14.00	15.00	22.00
Pvg. bot. and lwr slope	58,200 sq. yds.	2.30	1.50	2.44	2.00	2.45	2.18	2.40	2.85	2.20	2.65	2.35	2.93	2.89	3.05	2.763
Paving, upper slope	22,100 " "	3.75	3.25	3.20	2.50	3.40	3.12	4.00	3.87	4.75	3.87	3.88	3.68	4.00	3.75	4.66
Foot walk	3,100 " "	.75	.75	.85	.70	.65	.20	1.00	.75	.60	.90	1.85	1.50	1.00	.90	.90
Iron fence	3,460 lin. ft.	1.20	1.10	1.00	1.10	1.40	1.00	1.50	1.25	1.20	1.15	1.20	1.20	1.20	1.30	1.10
Temporary fence	*1,600 " "	160.00	320.00	150.00	320.00	200.00	320.00	500.00	600.00	192.00	500.00	300.00	160.00	500.00	200.00	480.00
Cut-off drain	*3,760 cu. yds.	5,400.00	9,600.00	7,500.00	4,136.00	7,000.00	5,577.00	5,000.00	7,100.00	9,580.00	7,500.00	6,400.00	7,520.00	7,000.00	5,500.00	10,753.00
Pipe laying*		5,300.00	2,630.00	2,500.00	6,000.00	3,500.00	4,385.00	4,000.00	4,100.00	2,000.00	5,000.00	6,000.00	4,120.00	6,250.00	5,000.00	7,500.00
Total		$550,502	$419,386	$441,913	$484,207	$494,929	$490,780	$558,070	$558,435	$559,679	$566,100	$568,245	$573,099	$588.590	$609,487	$678,118

* Lump sum bid. Contract awarded to Jonathan Clark & Sons Co.

DREDGING.—Boston, Mass.—Lieut.-Col. S.M. Mansfield, U. S. Engrs., opened the following bids April 19 for dredging in Lynn Harbor, as advertised in Engineering News:

Bidder.	Dredging, cu. yd.	Boulders* cu. yd.
C. H. Souther, 12 P. O. Square, Boston	$0.23	$8.00
Eastern Drdg. Co., P.O. box 3654, Boston	.24½	10.00
A. B. Martin, 59 High St., Boston	.21¾	8.00

*Over 3 tons each.

REPAIRING BREAKWATER.—Cleveland, O.—Col. Jared A. Smyth, U. S. Engrs., opened the following bids April 2 for repairing west breakwater at this city, as advertised in Engineering News:

Bids Received April 2 at Cleveland, O., for Repairing Breakwater.

Quantities.		McArthur Bros. Co., Chicago.	Carkin, Stickney & Cram, Detroit.	Hunkin Bros., Cleveland.	Jas. B. Donnelly, Buffalo.	L. P. & J. A. Smith Co., Cleveland.	Clements Bros. Cnstn Co. Cleveland.
White oak	368,076 ft. B.M.	$65.00	$38.00	$139.00	$79.00	$60.00	$100.00
Hemlock	261,900 " "	13.00	18.00	17.25	20.00	20.00	15.00
Old timber	595,000 " "	13.00	15.50	9.85	10.00	20.00	20.00
Stone or concrete blocks	250,310 cu. ft.	.40	.31	.49½	.44	.75	.68
Stone steps	60 pieces	1.00	2.50	3.70	5.00	3.00	2.00
Concrete	40,700 cu. yds.	7.35	7.60	5.32	7.29	8.00	7.65
Lag screws	88,230 lbs.	.03	.04	.03	.04	.04	.09
Screw bolts	12,300 "	.04	.02¾	.03	.04	.04	.08
Iron rods	64,104 "	.04	.03	.13	.06	.03	.10
Mooring rings	3,710 "	.06	.03	.10	.05	.05	.14
Wire nails	7,000 "	.03	.03	.05	.04	.05	.04
Total		$440.529	$421,102	$413,844	$455,738	$559.215	$550,456

DREDGING.—Oswego, N. Y.—Maj. W. T. Stanton, U. S. Engrs., received the following bids April 16 for dredging in Charlotte Harbor, N. Y., as advertised in Engineering News: Jos. R. McCollum, Port Huron, Mich, 20 cts. a cu. yd. in scow; Wm. E. Hingston, Buffalo, N. Y., 24½ cts.; W. J. Daly, Ogdensburg, N. Y., 19½ cts.

MACADAMIZING.—Roslyn (L. I.), N. Y.—Bids were opened April 17 for regulating, grading and macadamizing about a mile of road. W. W. Cocks, Secy. Highway Comrs., writes us that the contract for the Manhassett-Port Washington road was awarded to S. L. Hewlett and William Titus, of Roslyn; no contract was awarded for the Jericho road, as bids exceeded appropriation. The bids for the former road were as follows, price being for a 6-in. macadam roadway 15 ft. wide, including grading, etc.: Thos. F. Touhy & Co., Flushing, $1.57 per lin. ft.; Frank Gallicher, Brooklyn, $1.65; Andrews Bros., Mineola, $1.55; S. L. Hewlett and Wm. Titus, Roslyn, $1.09.

(For other Contract Prices, see next page.)

INDUSTRIAL NOTES.

H. B. COHO & CO., New York, have removed their offices from 203 Broadway to the St. Paul Building, 220 Broadway.

THE O. S. KELLY CO., Springfield, O., has a contract to furnish a 14-ton steam road roller to the city of Waukesha, Wis.

THE NEW YORK FILTER MFG. CO., New York, has removed its offices from 145 Broadway to the Beard Building, 120 Liberty St.

THE NORDBERG MFG. CO., Milwaukee, Wis., has appointed Robt. H. E. Porter, 150 Broadway, New York, eastern agent. The company is prepared to furnish Corliss engines, automatic cut-off poppet valve engine condensers, feed water heaters, etc., in the east as it has done for many years in the west.

THE RAILROAD SUPPLY CO., Owings Bldg., Chicago, reports that sales for the Wolhaupter arch and girder tie plate since Jan. 1 are approximately 1,000,000.

THE IOWA ELECTRIC & CONSTRUCTION CO., successor to the Hess Electric Co., Des Moines, Ia., has moved its offices and show rooms to 412 West Locust St.

THE SANITARY CONSTRUCTION CO., 56 Pine St., New York, has a contract for the erection of a disinfecting plant at the new buildings being erected for Bellevue Hospital, New York.

THE MILNE MFG. CO., of Monmouth, Ill., has recently sold a 2-horse Hawkeye machine for use on public works to Mr. C. De Garis, of Memphis, Tenn., for use on the Mississippi government levee near Luna Landing, Ark.; also a 2-horse Hawkeye machine to Mr. Ben. Talley, of Memphis, Tenn., to be used on his government contract levee work near Australia, Miss.

J. N. DUBARRY, JR., & CO., Baltimore, Md., have been awarded a contract on Union Rosendale cement and all Portland cements to be used by the city of Baltimore for the year of 1897-98.

THE RIDGEWAY DYNAMO & ENGINE CO., Ridgeway, Pa., has opened a branch office in the Hamilton Building, Pittsburg, with Mr. Wm. B. Brew in charge. Mr. Cyrus Robinson is manager of the company.

SCHNEIDER & CO., the famous manufacturers of armor plate, having lately acquired the gun factory of Havre, have now amalgamated with the "Forges et Chantiers de la Mediterranee." For the future all artillery manufactured in France, except that produced in the government factories, will bear the stamp of "Schneider-Canet."

THE HAMILTON BRIDGE CO., of Hamilton, Ont., has been awarded the contract for the steel work for a $50,000 grand stand to be built for the Fort Erie Jockey Club, Buffalo, N. Y., to be 311 ft. long, 95 ft. wide and have a seating capacity of 3,000.

THE STANDARD BOILER & BRIDGE CO., Bellaire, O., reports that owing to the large number of contracts on hand, work will begin at once on a new building which will double the capacity of its plant. New air compressors, calking machines, etc., will be purchased.

THE AURORA BOILER WORKS, of Aurora, Ill., has just shipped two car loads of tanks to Buffalo, to be used in a soap works, which were built for Messrs. Jobbins & Van Rhinebeck, of Aurora. Mr. Corbett reports that the company is also reasonably busy in its boiler department.

THE NATIONAL SWITCH AND SIGNAL CO., Easton, Pa., through its Signal Engineer, Mr. H. M. Sperry, has just closed a contract for block signals for the Chicago, St. Paul, Minneapolis & Omaha R. R. between Elroy and St. Paul, 198 miles. These signals will show red for danger and green for safety.

STEPHENS & O'ROURKE, 44 Broadway, New York, have been awarded the contract for pneumatic caisson foundations for the new building to be erected at the southwest corner of 22d St. and 5th Ave.; Henry Corn, owner; Robert Maynicke, 725 Broadway, New York, architect; work to be begun May 1, 1897.

MESSRS. ROWE & ROWE, Consulting Engineers, Fisher Bldg., Chicago, have been engaged by the Atlantic & Pacific R. R. to prepare a complete set of plans and specifications for a large timber treating plant, which is to be built at once. They have recently completed plans and specifications for a large timber treating plant for the Texas Tile & Lumber Preserving Co., of Summerville, Tex. Mr. R. D. Rowe, M. Am. Soc. C. E., is in direct charge of the work.

THE HAUGH-NOELKE IRON WORKS, Indianapolis, Ind., has been awarded the contract for all the structural iron work above the fifth floor as well as all the ornamental iron work and the iron work for the dome of the Kansas City post-office and court house; also for all the iron work for the new building for the St. Mary's (Ind.) Academy. They have recently completed contracts for the iron work of the Kansas City court house roof and the new Willoughby building in Indianapolis. Mr. James McKim is the Engineer.

FRASER & CHALMERS, Chicago, have recently shipped to the Sandwich Islands for irrigating purposes two duplex double-acting Riedler pumps, to be driven by a horizontal Cross compound condensing Corliss engine. Each has a capacity of 12,000,000 gallons, and they will work against heads of 120 and 200 ft., respectively. The Riedler pump furnished by this firm to the Chapin Mining Co., of Iron Mountain, Mich., has been successfully started up, and is said to be giving good satisfaction. It is to work against a head of about 1,700 ft. and develop a capacity of 2,200 gallons per minute.

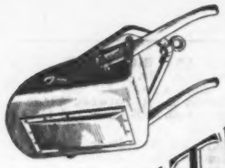
WM. SWINDELL & BROS., Pittsburg, Pa., are said to have recently built and placed in successful operation at the Shelby Steel Tube Works, Shelby, O., ten of their patent furnaces for heating and annealing bicycle tubing and six of their continuous gas producers. They have completed four of their continuous gas producers for Morrison, Colwell & Page, Cohoes, N. Y., also two for the General Electric Co., Lynn, Mass. For the Crescent Steel Co., Pittsburg, they have recently placed in successful operation a basic open hearth furnace and two heating furnaces with the necessary gas plant. The new contracts in course of erection by this firm comprise 24 furnaces and 12 continuous gas producers.

THEODORE ALTENEDER & SONS, 945 Ridge Ave., Philadelphia, well known makers of drawing instruments, issue a circular of an article which every draftsman and engineer will appreciate. It is a neat little boxwood scale, 3 ins. in length, graduated on every edge, which is sent post paid to any address for 10 cts. in stamps. Either triangular or flat scales are furnished, and a list of the 15 different graduations which are in stock is sent to any engineer on request. These scales are for many purposes more convenient than a scale of 1 ft. length, and every draftsman should have one or more of them in his kit.

JAMES STEWART & CO., of St. Louis, Mo., and Buffalo, N. Y., has recently been awarded the contract for building the shops of the Merchants' Dispatch Transportation Co., at Penfield, N. Y., which will include car, blacksmith and general repair shops, as well as a power house, mill, machine and subsidiary shops. They also have the contract for a $50,000 grand stand for the Fort Erie Jockey Club, of Buffalo, N. Y., to be 311 ft. long, 95 ft. wide and seating capacity of 3,000. They have recently finished a 1,000,000-bushel elevator for the Illinois Central R. R. at New Orleans. Mr. Walter A. Calhoun, Ch. Engr., is in charge of the Buffalo work, having recently gone there from New Orleans.

THE BRAEBURN STEEL CO., Pittsburg, Pa., is constructing a new plant at Braeburn station on the Allegheny Valley road, consisting of a main building 725 ft. long with a 53-ft. span. It is said that the building will contain one crucible melting furnace, a 5-ton basic open hearth furnace ingot department, 14-in. and 10-in. bar mills, forging department and annealing plant. The different departments are so arranged that the raw material is brought in at one end, goes through the various stages of manufacture, and is finished and shipped at the other end, without any rehandling whatever. The entire building is spanned by two Shaw electric traveling cranes, one of 10 tons and one of 5 tons capacity. Pres., Wm. Metcalf; Secy. and Treas., D. W. Dunlevy.

THE MICHIGAN PIPE CO., at Bay City, Mich., has rebuilt its plant, which was entirely destroyed by fire Dec. 8, 1896. The new works opened last week, starting with a large order of pipe for a gold mine in Arizona, and also on a large contract for creosoted timber. The company is manufacturing stave pipe of large diameters, built similarly to its improved Wyckoff water pipe, except that the pipe is made of staves instead of being bored from the solid logs. This stave pipe is adapted for the use of large water conduits, sewer siphons and outfalls, and is claimed to be cheaper than other forms of pipe used for these purposes. The water board of Bay City recently used a long line of 30-in. stave pipe which this company manu-



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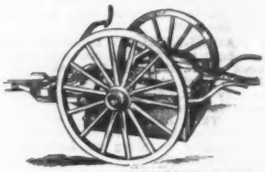

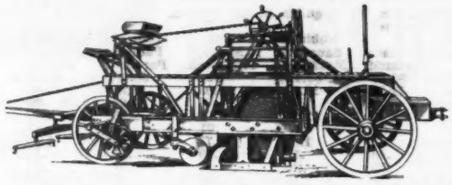

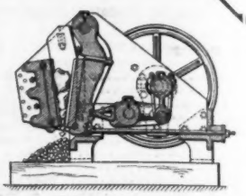

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THE ONLY BRACE MADE WITH STEEL SCREW.

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56-58 PINE STREET, NEW YORK,

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PORTABLE GARBAGE FURNACES, for Hotels, etc.
STEAM DISINFECTING APPARATUS, for Public Institutions and Cities.
FORMALDEHYDE GAS REGENERATORS, for House Disinfection.
SEND FOR CATALOGUE. GARBAGE CREMATORS for Cities.

HAWKEYE GRUB AND STUMP MACHINE

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90 page Catalogue free on application. Works on either standing Timber or Stumps

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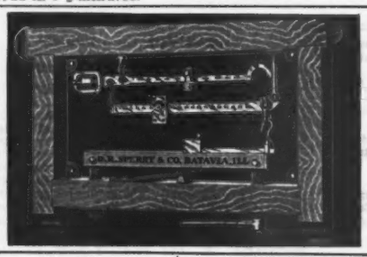

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CEMENTS, BUILDERS' MATERIALS, HARDWOOD and SLATE MANTELS, SEWER PIPE.

Agents or Stirling Boilers, Meissner Stoker, Pedrick & Ayer Co.

"BLASTING CAPS."

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Sole Agent for the U. S. A.,

66 Maiden Lane New York.

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FOR WATER PIPES, FOR GAS, OIL, COMPRESSED AIR, ETC.

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CHAPMAN DERRICK AND WRECKING CO.,

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EXPERIENCED DIVERS

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Office open day and night. Two long distance telephones, Broad, 1831 and 1832.

NONPAREIL

Cork Pipe Covering.

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Not affected by any steam heated surface, water, dampness, frost, concussion nor vibration.

HOLDS ITS FORM. VERY TOUGH

POWER

POWER SPECIALTY CO.

126 Liberty St., N. Y.

CAST IRON PIPE.

FREDERICK, MARYLAND.

Sealed proposals will be received by the Mayor and Board of Aldermen of the City of Frederick, Maryland, up to 7 o'clock p. m. on April 30, 1897, for furnishing 660 tons of Cast Iron Water Pipes 12 ins. in diameter.

All bids must be accompanied by a certified check of $300, made payable to the Board of Aldermen.

Specifications and forms of proposal and contract can be obtained at the office of the City Registrar, Frederick, Md., or at the office of the engineers, 150 Nassau St., New York.

Proposals must be endorsed "Bid for pipes" and addressed to G. W. Tyson, Chairman of the Board. The right is reserved to reject any or all bids.

A. R. YEAKLE, Mayor,
G. W. TYSON, Chairman,
JONATHAN BISER,
C. L. DIFFENDAL,
L. A. RICE,
C. A. POOLE,
Board of Aldermen.

POWNALL & MINSHALL, Engineers. 16-1t

For Other Proposals See Page XXVI.

POSTPONEMENT NOTICE.

VERNON AVENUE BRIDGE.

BROOKLYN, N. Y.

Notice is hereby given that the bids for the construction of the Bascule Bridge and the Temporary Bridge over Newtown Creek, between Manhattan Avenue and Vernon Avenue, will be received by the Joint Bridge Committee of the Board of Aldermen of the City of Brooklyn and the Board of Supervisors of the County of Queens, at the Common Council Chamber in the City Hall, Brooklyn, N. Y., on Wednesday, April 28th, at 12 o'clock, noon, instead of on April 22d, as heretofore advertised.

By order of the Joint Bridge Committee.
WILLIAM J. WASSMUTH, Secretary.
16-1t.

U. S. ENGINEER OFFICE, Oswego, N. Y., March 23, 1897.—Sealed proposals for EXCAVATING ROCK and FOR DREDGING at Oswego Harbor, N. Y., will be received here until noon, April 29, 1897, and then publicly opened. Information furnished upon application. W. S. STANTON, Major Engrs. 13-4t

U. S. ENGINEER OFFICE, Oswego, N. Y., April 17, 1897.—Sealed proposals for building stone superstructure on part of BREAKWATER, at Burlington, Vt., will be received here until noon, May 17, 1897, and then publicly opened. Information furnished upon application. W. S. STANTON, Maj. Engrs. 16-4t

PAVEMENTS.

OSWEGO, N. Y.

Sealed proposals for the construction of Trinidad Pitch Lake, Bermudez or Sicilian and German Rock Asphalt Pavements in East First Street and in West Second Street, and also for Repressed Vitrified Brick Pavement in West Second Street, will be received by the Department of Works up to 2:30 o'clock on May 3d, 1897, and then publicly opened.

Plans, specifications, etc., can be seen at the office of the City Engineer, and copies of specifications can be obtained of the Department of Works.

Estimated area of Asphalt Pavement, 19,263 sq. yards. Estimated area of Brick Pavement, 5,568 sq. yards.

The right is reserved to reject any or all bids.

By order of the Department of Works.
E. A. COOKE, Clerk.
Oswego, N. Y., April 19, 1897. 16-1t

U. S. ENGINEER OFFICE, Telephone Building, Detroit, Mich., April 17, 1897.—Sealed proposals for DREDGING Black River, at Port Huron, Mich.; Bar at mouth of Black River, Mich.; Belle River, at Marine City, Mich.; and Clinton River, Mich., will be received here until 12 o'clock noon (standard time), May 7, 1897, and then publicly opened. Apply here for information. G. J. LYDECKER, Lt.-Col., Engrs. 16-2t

ELECTRIC LIGHTING.

CLERK'S DEPARTMENT, CITY OF MOBILE, ALA.

Plans, Specifications and Sealed Bids addressed to the Hon. Harry T. Inge, Chairman of the Street Committee of the City of Mobile, Alabama, for lighting the city, will be received until May 15th, 1897, at which date they will be publicly opened.

Proposals must be for a term of five years, beginning Nov. 1st, 1897, for Two Hundred (200) Arc Lights of 2,000 candle-power each, direct current, to be lighted every night from sunset until sunrise.

A certified check for One Thousand Dollars ($1,000.00) as a guarantee of the faithful performance of contract must accompany each bid, which sum of $1,000.00 shall be forfeited to the City of Mobile in the event of failure to furnish by the party or parties awarded the contract a good and sufficient bond in the sum of Ten Thousand Dollars within ten days from the awarding of said contract.

The city reserves the right to reject any or all bids.

For specifications address
HARRY T. INGE,
Chairman of Street Committee,
Mobile, Ala.
16-2t

OFFICE CONSTRUCTING QUARTERMASTER of Fort Hancock, N. J., Army Building, Whitehall St., New York City, April 12, 1897.—Proposals for furnishing MANTELS FOR BUILDINGS under construction at Fort Hancock, N. J., are invited, for selection by May 10, 1897. Specifications may be seen and information obtained here. C. A. DEVOL, Capt., A. Q. M., U. S. Army. 15-2t

For Other Proposals see Page XXVI.

factured for the intake pipe. This pipe is made in lengths of 8 ft., having mortise and tenon joints 4 ins. long. This is said to give a greater bearing surface at the joint than is possible to obtain by any form of butt joints.

THE GENERAL ELECTRIC CO., Schenectady, N. Y., has a contract for equipping the Woodward mines of the Delaware, Lackawanna & Western R. R. at Kingston, Pa., with electric haulage. The generating plant will consist of one 165-K.-W. dynamo directly connected to an American Ball engine. The circuits will be three in number. The first will pass down a vertical shaft 725 ft. deep, and will operate one 10-ton locomotive in the Cooper vein. The two others will be carried down another vertical shaft 1,026 ft. deep to operate two 10-ton locomotives in the Red Ash and Baltimore veins. These locomotives will be equipped with two 40-HP. General Electric motors, and will handle trips of loaded mine cars, each loaded car weighing about 4½ tons. It is estimated that this installation will show in operation a net saving of 29½% over mule haulage, including a large reserve for depreciation, interest and fixed charges. The total output of these three locomotives will be about 3,800 tons a day, and the total length of trolley wire in the gangway will shortly reach 4½ miles.

THE CHASE CONSTRUCTION CO., Detroit, Mich., has been incorporated with an authorized capital of $25,000, and will devote itself to construction and equipment of central station lighting, electric railways, steam and waterworks plants. The company has secured a contract to build an electric railway between Cleveland and Lorain, O., for the Lorain & Cleveland Electric R. R. Co., to be completed by July 1. The officers of the company are: Pres. and Treas., George E. Fisher; Secy. and Ch. Engr., O. D. Chase; Vice-Pres. and Supt. of Construction, E. N. Chase. Mr. O. D. Chase was formerly electrician and superintendent of the Commercial Electric Engineering Co., and Mr. George E. Fisher was its business manager. This company, during its existence, installed 56 central station lighting plants and 167 isolated plants, in addition to a large volume of other electrical work. The Chase Construction Co. has secured the services of Mr. E. F. Mann as Superintendent of Railway Construction. Mr. Mann superintended the construction of the system of the Detroit Electric Ry. Co., Niagara Falls., Toronto, and a number of the Cleveland roads, covering a period of 12 years. The company has offices in the new Majestic building.

THE DICKSON MFG. CO., SCRANTON, PA., has commenced the construction of a new boiler shop, 130 x 225 ft. This building will have a steel framework throughout. The sides will be covered with corrugated iron and the roof with composition roofing on plank. The main boiler shop is about 52 ft. wide and 45 ft. high; 30 ft. above the ground is a runway made of substantial steel girders, which carry a 30-ton power traveling crane. At one end of the main shop is a riveting tower, 25 x 50 ft., having a runway carrying a 20-ton crane 50 ft. above the floor level. Adjoining the main shop is a punch room, which is about 50 ft. wide, extending the full length of the building. Attached to the roof trusses of this portion is a traveling crane of 5 tons capacity, which covers the whole floor surface. Adjoining the punch shop is a space for the flange fires and other furnaces, 25 x 225 ft. All the main posts of the building are arranged so that jib cranes can be attached to them, and the trusses are arranged so that shafting and other machinery may be attached at convenient points. The steel work for this building was designed and will be furnished and erected by the Berlin Iron Bridge Co., of East Berlin, Conn.—At the annual meeting of the Dickson Mfg. Co. the old board of directors was reelected as follows: William Connell, W. W. Scranton, C. S. Weston, C. C. Rose, W. H. Storrs, C. H. Zehnder, H. M. Boies, Samuel Sloan and C. R. Manville.

CONTRACT PRICES.

PIPE SEWER.—Omaha, Neb.—The board of public works opened the following bids April 16 for constructing a 24-in. pipe sewers; all local bidders:

MACADAMIZING.—Jamaica, N. Y.—John J. McLaughlin, County Engr., opened the following bids April 1 for constructing county roads, as advertised in Engineering News, macadam 8 ins. thick:

Bids Received at Jamaica, N. Y., April 1, for Macadamizing County Roads.

Bidder.	Embankment, 22,800 cu. yds.	Excavation, 8,600 cu. yds.	Macadam, 47,800 sq. yds.	C. I. pipe culverts, 80,000 lbs.	Catchbasins, 24	Rubble masonry, 250 cu. ft.	Random ashlar, 250 cu. ft.	Total.
Thomas Byrnes, Brooklyn, N. Y.	$0.40	.....	$1.47	$0.01½	$20.00	$0.15	$0.50	$80,784
Edward Roach, Far Rockaway, N. Y.	.57	$0.23	.95	.01⅞	47.00	.195	.23	62,078
D. C. Bouker, Jr., 110 Wall St., New York	.50	.....	1.00	.01½	50.00	.15	.40	60,633
Chapman & Fitch, 253 Broadway, New York	.40	.....	.89	.02	40.00	.20	.50	53,511
Smith & Co., Astoria, N. Y. (accepted)	.25	.....	.92	.01¼	40.00	.20	.50	51,125

MACADAMIZING.—Long Island City, N. Y.—John J. McLaughlin, County Engr., opened the following bids April 13 for macadamizing county roads, as advertised in Engineering News; bidders were (1) T. F. Tuohey & Co., Flushing, N. Y.; (2) Jas. F. Gillen, Brooklyn; (3) W. B. Wilson, Long Island City; (4) Jas. P. Graham, Brooklyn; (5) Twombly & Eldert, Jamaica, N. Y.; (6) D. C. Bouker, Jr., New York; (7) Smith & Lutjins, Long Island City:

Newtown and Flushing Road; 26,500 lin. ft.; 8 ins. Macadam:

		1.	2.	3.
Embankment	47,000 cu. yds.	$0.30	$0.25	$0.24
Excavation	25,400 cu. yds.	....	....	....
Macadam	41,200 sq. yds.	1.25	1.25	.84
Iron pipe culverts	99,300 lbs.	.02	.015	.015
Catch basins	10	50.00	40.00	35.00
Concrete	144 cu. ft.	.40	.40	.15
Broken r'ge ashlar	356 " "	.80	1.00	.25
Cobble pavement	2,660 sq. yds.	.45	.50	.30
2-ins. trap rock	1,240 cu. yds.	3.40	3.25	2.25
Limesto'e scr'nings	375 " "	3.40	3.25	1.85
Resurfacing	28,000 sq. yds.	.40	.40	.11
Total		$86,316	$83,332*	$55,200

Tompkins Road; 7,300 lin. ft.; 8 ins. Macadam.

		4.	5.	1.
Embankment	22,600 cu. yds.	$0.35	$0.35	$0.35
Excavation	12,100 " "	....	....	....
Macadam	14,600 sq. yds.	1.15	1.12	1.02
Iron pipe culvert	49,600 lbs.	.02	.02	.02
Catch basins	2	55.00	50.00	45.00
Concrete	86 cu. yds.	15.00	12.00	10.00
Broken r'ge ashlar	158 " "	15.00	15.00	15.00
Cobble pavement	1,600 sq. yds.	.46	.45	.40
Steel bridge	1	3,750	3,500	3,200
Total		$33,948	$32,976	$29,824*

Hillside Ave.; 27,550 lin. ft.; 9 ins. Macadam.

		6.	7.
Embankment	62,200 cu. yds.	....	....
Excavation	78,550 " "	$0.22	$0.19
Macadam	55,100 sq. yds.	1.05	1.03
Iron pipe culverts	70,000 lbs.	.015	.01¾
Catch basins	5	50.00	40.00
Cobble pavement	1,200 sq. yds.	.60	.55
Granite "	50 " "	3.00	3.00
Total		$77,306	$73,913*

* Awarded contract.

LAYING WATER PIPE.—Milwaukee, Wis.—Local papers report as follows the bids opened by the board of public works April 13 for laying all the water pipe which is to be laid in the city this summer: There were nine bidders and prices were very low. For laying 6-in. pipes R. J. Hickey and the Vogt Fuel & Construction Co. each bid 16½ cts. a lin. ft. The price last year was 17¾ cts. For laying the 8-in. pipes the Vogt company was the lowest bidder, 20 cts. a ft., as compared with 22¾ cts. last year. Charles Forrestal was lowest for laying 12-in. pipes, at 29 cts. a ft. In 1896 the city paid 32 cts. a ft.

SEWERS.—Cedar Rapids, Ia.—E. P. Boynton, Cy. Engr., opened the following bids April 15 for sewer construction; all local bidders:

Central Park Storm Sewer, Section 1.

Work.	Ford & Dehaunt.	Bokorny & Wardle.	I. H. Arel.	Murray Bros.	M. S. Jackson.
Main trunk, Sec. B, lin. ft	$8.00	....	....	....	$12.70
Section A, per lin ft.	17.50	....	....	....	24.00
Section C, 110 ft.	1,650	....	....	....	2,650
Catchbasin cns, 18-in. p.	.70	....	....	....	1.00
Grates, 3 x 3 ft.	10.00	....	....	....	15.00
Grates, No. 3	9.00	....	....	....	16.00
Brick in spcls, per 1,000.	21.00	....	....	....	20.00
Manhole covers, each	9.00	....	....	....	9.00
Riprap, per cu. yd.	3.00	....	....	....	2.00
Ex. concrete, per cu. yd.	6.00	....	....	....	3.50
Total	*$11,839	....	....	....	$16,599

Central Park Storm Sewer, Section 3.

Main trunk, Sec. B, lin. ft.	...	....	....	$7.90	$8.25
Catchbasin cons., 18-in. p.	...	....	....	.75	.80
Grates, 3 x 3 ft.	...	....	....	16.25	15.00
Brick in spcls, per 1,000	...	....	....	18.00	20.00
Manhole covers, each	...	....	....	9.50	9.00
Riprap, per cu. yd.	...	....	....	2.50	2.00
Ex. concrete, per cu. yd.	...	....	....	3.00	4.00
Earth filling, per cu. yd.	...	....	....	.25	.35
Total	...	....	....	*$5,045	$5,264

Eighth St. Storm Sewer.

Main trunk, 30-in. pipe.	...	$2.68	$2.27	$2.50	$2.25
36-in., 2-ring brick	$2.87	3.47	....	2.60	3.25
36-in., 1-ring brick	1.87	1.77	....	2.00	...
Catchbasin cons. 24-in. p	2.50	1.60	1.15	1.30	1.50
18-in. pipe	.70	.76	.77	.75	.75
Grates, 3 x 3 ft.	10.00	15.00	14.25	16.25	16.00
Grates, No. 3	9.00	10.00	....	9.50	12.00
Brick in spcls, per 1,000	21.00	17.00	15.00	18.00	22.00
Manhole covers, each	9.00	10.00	8.25	9.50	10.00
Total, 30-in. pipe	...	$4.946	$4.218	$4.672	$4.424
Total, 36-in., 1-ring	$3,850	$3,581*	....	$3,922	....

13th Ave., West, Storm Sewer Extension.

New section trnk, lin. ft.	$8.96	....	....	$9.50	$12.70
Rebuilding trunk, lin. ft.	8.00	....	....	9.50	10.70
Building intake	100.00	....	....	75.00	50.00
Catchbasin cons, 30-in. p	2.50	....	....	2.50	2.60
24-in. pipe	1.50	....	....	1.40	1.50
Brick in spcls, per 1,000	21.00	....	....	18.00	22.00
3 catchbasin grates	65.00	....	....	93.60	125.00
Total	$2,545*	....	....	$2,665	$3,407

Culvert on First St., West.

Culvert complete	$1,965	$1,342	....	....	....
Earth filling, per cu. yd.	...	.18	....	....	....
Ex lumber, per M. ft.	25.00	16.00	....	....	....
Extra concrete, per cu. yd	5.00	6.00	....	....	....
Riprap, per cu. yd.	3.00	3.00	....	....	....
Total	$1,965	$1,342*	....	....	....

*Awarded contract

Bids Received at Omaha, Neb., April 16, for Constructing a Sewer.

Bidder.		24-in. pipe, 1,550 ft.	Manhole, 10 ft.	Addt'l manhole, 9 ft.	Spec'l manhole, 20 ft.	Extensions to— M'hole, 13thSt., 1 ft.	M'hole, 14thSt., 3 ft.	M'hole, 15thSt., 4½ ft.	Total.
J. O. Corby	Portland cement.	$2.58	$42.50	$38.25	$85.00	$4.25	$12.75	$19.12	$4,201
" "	American "	2.57	40.00	36.00	80.00	4.00	12.00	18.00	4,174
Katz & Crandall	Portland "	2.64	30.00	27.00	85.00	10.00	14.00	16.50	4,365
" "	American "	2.61	27.00	22.50	74.00	9.00	12.00	14.50	4,285
James Creighton	Portland "	4.05	90.00	36.00	90.00	18.00	18.00	18.00	6,548
" "	American "	4.05	90.00	36.00	90.00	18.00	18.00	18.00	6,548
Charles E. Fanning	American "	3.37	40.00	36.00	40.00	5.00	15.00	22.50	5,382
P. H. Mahoney	Portland "	3.17	30.00	31.50	100.00	18.00	23.00	28.00	5,144
" "	American "	3.07	27.00	27.00	95.00	15.00	20.00	25.00	4,968

NEW DRAINAGE SYSTEM

OF

NEW ORLEANS, LA.

STEAM AND ELECTRICITY.

Sealed proposals will be received at the office of the Drainage Commission of New Orleans, La., Room No. 22, City Hall, up to NOON OF JUNE 1, 1897, for the construction of the following works, a separate bid being required for each class of work, as indicated below:

1. FOR A CENTRAL ELECTRIC POWER STATION.—This bid shall be for the construction of a central electric power station for the operation of the pumps at the several pumping stations, and shall include the foundations, buildings, boilers, generators, and lines to the pump motors, all complete. Deposit of $1,500 in cash or certified check, to accompany bid as guarantee of good faith. Bond of successful bidder, $80,000.

2. FOR PUMPING STATIONS OPERATED BY ELECTRICITY, as Follows: St. Louis pumping station No. 2, Metairie pumping station No. 6, Orleans pumping station No. 7 This bid shall include the erection and installation of the three pumping stations, complete, with foundations, buildings, suction, discharge and approach basins, pumps, and electric motors. Deposit of $1,500 in cash, or certified check. Bond of successful bidder, $75,000.

3. FOR PUMPING STATIONS OPERATED BY STEAM, as Follows: St. Louis pumping station No. 2, Metairie pumping station No. 6, Orleans pumping station No. 7. This bid shall include the erection and installation of the three pumping stations, complete, with foundations, buildings, suction, discharge, and approach basins, boilers, engines, pumps, pipes and stacks. Deposit of $1,500 in cash or certified check. Bond of successful bidder $75,000.

4. FOR LINED AND COVERED CANALS, viz.—St. Louis canal, Tributary canals. Bids to be at a price per unit of material, whether excavated or used in construction. This work will consist of not less than 10,000 feet of canals, eight (8) to twenty-eight (28) feet wide and six (6) to fifteen (15) feet deep. Deposit of $2,500 in cash or certified check. Bond of successful bidder, $125,000.

5. FOR OPEN AND UNLINED CANALS, which shall include excavation of new canals and enlargements of existing canals, with the construction of embankment along apart of the work. Approximate estimate 500,000 cu. yds. of excavation. Deposit of $700 in cash or certified check. Bond of successful bidder, $35,000.

Plans and specifications for the above works may be seen at the office of the commission on and after April 1, 1897.

The right is reserved to reject any and all bids. R. M. WALMSLEY, President.
F. G. FRERET, Secretary. 12-6t

POSTPONEMENT

TENDERS FOR STEEL BRIDGES

TORONTO, ONT.

Tenders will be received by registered post only, addressed to the Chairman of the Board of Control, City Hall, Toronto, up to noon on WEDNESDAY, 14TH DAY OF APRIL NEXT, for the construction of the following works:

Two steel bridges, carrying Grand Trunk Railway. One steel bridge, carrying Canadian Pacific Railway, over Queen street subway.

Specifications and drawings may be seen and forms of tender obtained at the office of the City Engineer, Toronto.

A deposit in the form of a market check, payable to the order of the City Treasurer, for the sum of 2½ per cent. on the value of the work tendered for must accompany each and every tender, otherwise they will will not be entertained.

Tenders must bear the bona-fide signature of the contractor and his sureties, or they will be ruled out as informal.

Lowest or any tender not necessarily accepted.

R. J. FLEMING (Mayor),
Chairman Board of Control.

City Hall, Toronto, March 31, 1897.

The time for receiving the tenders referred to in the above advertisement has been extended until noon on Thursday, the 13th day of May next.

ROBERT J. FLEMING (Mayor),
Chairman Board of Control.

City Hall, Toronto, April 9, 1897. 16-1t

U. S. ENGINEER OFFICE, 136 Island St., Grand Rapids, Mich., April 15, 1897.—Sealed proposals for REPAIRING Government Pier at Portage Lake, Mich., will be received here until 12 o'clock, noon, May 14, 1897, and then publicly opened. Information furnished on application. C. M'D. TOWNSEND, Capt., Engrs. 16-4t

U. S. ENGINEER OFFICE, 537 Congress St., Portland, Me., March 31, 1897.—Sealed proposals for CONCRETE MIXER, STONE CRUSHER, ENGINE AND BOILER, HOISTING ENGINE TROLLEY, DUMP CARS, RAILS AND WIRE ROPE will be received here until 3 p. m., April 24, 1897, and then publicly opened. Information furnished on application. A. N. DAMRELL, Lt.-Col., Engrs. 15-2t.

U. S. ENGINEER OFFICE, Army Building, New York, April 1, 1897.—To Whom It May Concern: Whereas, the wreck of the steamship "Alisa" has been lying in the Main Ship Channel on the east side of the Narrows, New York Harbor, since February 29, 1896, has been abandoned by owners and underwriters, and is a dangerous obstruction to navigation, notice is hereby given to all persons interested in said vessel, her cargo and other property therein, that the wreck will be removed by the United States as a derelict, under authority of law. Sealed proposals for REMOVAL OF SAID WRECK will be received here until 12 m., May 1, 1897, and then publicly opened. Information furnished on application. WILLIAM LUDLOW, Lieut.-Col., Engrs. 15-3t.

SUBWAY STATION.

NOTICE TO CONTRACTORS.—City of Boston.—Boston Transit Commission.—Sealed bids for building Section 7, Scollay square underground station of the subway, will be received at the office of the Commission, 20 Beacon street, Boston, Mass., till 12 O'clock m. of Wednesday, May 12, 1897. Each bid must be accompanied by a certified check for the sum of $2,500. Much of the work must be done at night. The structure will consist of a combination of steel and masonry. Some of the items are estimated to be as follows: 22,000 cubic yards earth excavation, 580 tons iron and steel, furnished by Commission, to be set in place; 5,000 cubic yards concrete and brick masonry. Plans can be seen and specifications and forms of contract can be obtained at 20 Beacon street, fifth floor. A bond will be required for the faithful performance of the contract in a sum of 20 per cent. of the amount. The Commission reserves the right to reject any and all bids and reserves the right to award the contract as it deems for the best interest of the City of Boston. GEORGE G. CROCKER, Chairman; CHARLES H. DALTON, THOMAS J. GARGAN, GEORGE F. SWAIN, HORACE G. ALLEN, Boston Transit Commission; HOWARD A. CARSON, Chief Engineer; B. LEIGHTON BEAL, Secretary. 16-3t

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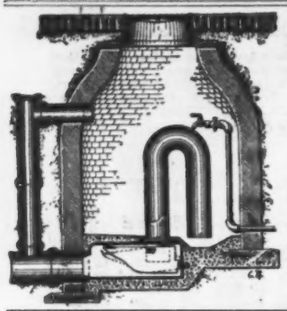

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EDSON MANUFACTURING CO., 132 Commercial St., Boston, Mass.

COMPLETING TUNNEL.

DEPARTMENT OF PUBLIC WORKS,
BUFFALO, N. Y., April , 1897.

Sealed proposals will be received by the Board of Public Works, at their office, Room No. 1, City and County Hall, Buffalo, N. Y., until 11 o'clock a. m., on MAY 6TH, 1897, for the completion of the work on the Tunnel from the Pumping Station to the Inlet Pier and the work in connection therewith contracted to be done by A. C. Douglas by contract made on the 30th day of July, 1895, in accordance with terms and conditions of said contract and the plans and specifications forming a part thereof.

Plans and specifications and estimates of quantities can be seen, and printed forms of proposals and any desired information can be obtained, at the Office of the Bureau of Water.

The Department reserves the right to reject any and all bids. R. G. PARSONS,
16-2t Secy. Board of Public Works.

BRICK AND CHERT PAVING.

MERIDIAN, MISS., April 9, 1897.

Sealed proposals for paving streets in the city of Meridian, Miss., with vitrified brick, on concrete foundation, approximately 15,000 square yards, also proposals for paving with chert, approximately 30,000 square yards, addressed to I. A. Mooser, City Clerk, Meridian, Miss., will be received at the office of said City Clerk until 12 o'clock, noon, Friday, May 7, 1897. Specifications for each class of paving, including proposal blanks and all other necessary information may be had by application to undersigned Clerk or Mayor.

E. H. DIAL, Mayor.
I. A. MOOSER, City Clerk. 15-3t.

PUMPING ENGINE.

OFFICE BOARD OF WATER COMMISSIONERS,
ST. PAUL, March 31st, 1897.

Sealed proposals will be received at the Office of the Board of Water Commissioners until 12 o'clock m. on the 3d day of May, 1897, for a 10,000,000-gallon pumping engine, to be erected at McCarron Lake pumping station, according to the plans and specifications on file in the office of the Board of Water Commissioners. Each proposal must be accompanied by a bidder's bond for the sum of 20 per cent. of the amount bid, or in lieu of said bond, a certified check for $3,000 on some State or National Bank in the City of St. Paul, payable at sight, to the order of the Secretary of the Board of Water Commissioners. Such check accompanying unsuccessful bid will be returned immediately after the award, rejection, or final disposition of the contract. The person or persons to whom the contract may be awarded will be required to execute the contract and give a bond for the full amount of the contract within two weeks of the date of the award, and in case of failure or neglect to do so, he or they will be considered as having abandoned it and as in default to the City of St. Paul. No bids will be considered offering less duty than 130,000,000 foot pounds. The time for the completion of the contract will date from the day of the awarding of same. The Board reserves the right to reject any and all bids. Bids must be endorsed "Proposals for Pumping Engine," and addressed to the undersigned.

Plans and specifications can be examined at the office of the Engineering News, New York city.

14-3t JOHN CAULFIELD,
Secretary Board of Water Commissioners.

DAM, POWER STATION, ETC.

MANCHESTER, N. H.

Sealed proposals will be received by the Union Electric Company, of Manchester, N. H., for building a wooden dam across the Piscataquog River in Goffstown, N. H., with masonry abutments, wing walls, and river walls; brick power house, one story, 88 ft. × 30 ft. inside; head gates, etc. Bidding will close at noon of Friday, May 14, 1897.

Estimated principal quantities are as follows:

600 M. ft. board measure timber in dam.
8,000 cu. yds. rock filling in cribs of dam.
3,000 " " rubble masonry in cement mortar.
600 cu. yds. dry rubble masonry.
250 " " rock excavation.
1,000 " " earth "
2,500 " " " filling.

Proposals must be made on the blank forms attached to specifications, and be accompanied by a certified check for $750, made payable to the Union Electric Company, said check to be forfeited by the successful bidder in case he neglects or refuses to execute the contract within five days from the date of the award to him.

Specifications may be obtained and plans seen at the office of the Union Electric Company, 14 Market St., Manchester, N. H., or at the office of Bartlett & Gay, Engineers, 852 Elm St., Manchester, N. H.

The Union Electric Company will furnish all lumber, cement, drift-bolts, ledge-bolts, brick and iron work of all kinds; the Contractor to furnish sand, stone, tools, forms and labor.

The Union Electric Company reserves the right to reject any and all bids.

UNION ELECTRIC COMPANY,
ROBIE WHITNEY, Pres.
GEORGE A. LEIGHTON, Treas.
EUGENE S. WHITNEY, Supt.
BARTLETT & GAY, Engineers, Manchester, N. H. 16-1t

Commonwealth of Massachusetts.

METROPOLITAN WATER BOARD.

LAYING WATER PIPES.

Sealed proposals will be received at the office of the Metropolitan Water Board, 3 Mt. Vernon Street, Boston, Mass., until 2:30 o'clock, p. m., of Tuesday, May 4, 1897, for laying about 11,000 ft. of 36-in. cast-iron water pipes in Malden, Melrose and Stoneham.

The greater part of this work is to be done in the Middlesex Fells Reservation, and the contract will include about 4,000 cubic yards of rock excavation.

Pamphlets containing further information for bidders, forms of proposal, contract and specifications, will be mailed to contractors who apply to the Chief Engineer, or may be obtained at his office, 3 Mt. Vernon Street, and plans may be seen at his office. The printed forms must be used in making proposals. The Board reserves the right to reject any or all proposals, or to accept the proposal deemed best for the Commonwealth.

HENRY H. SPRAGUE, Chairman,
WILMOT R. EVANS,
HENRY P. WALCOTT,
Metropolitan Water Board.
FREDERIC P. STEARNS, Chief Engineer.
WILLIAM N. DAVENPORT, Secretary.
Boston, April 20, 1897. 16-2t

COUNTY COURT HOUSE.

GALVESTON, TEXAS.

Sealed proposals will be received at the office of N. J. CLAYTON & CO., ARCHITECTS, 22d and Strand, Galveston, Tex., until MONDAY, MAY 10TH, 1897, AT 12 M., for the construction and completion of the county court house for Galveston County, at Galveston, Tex., in accordance with the drawings and specifications of said N. J. Clayton & Co., architects.

The drawings and specifications can be seen in the office of said architects on and after MONDAY, APRIL 12, 1897, and any further information regarding the work can be obtained by calling on or addressing the architects.

A certified check in amount of $5,000, made payable to the order of the county judge of Galveston County, will be required from each person or firm submitting proposals, and the successful bidder or bidders will be required to give bond in amount of $50,000 for the faithful performance of the contract and to protect the county against any claims or liens from subcontractors for materials or labor furnished to the general contractor or contractors in the fulfillment of the contract.

All proposals submitted must be based upon the union scale of wages and the eight-hour working day for all workmen employed in the erection of the building.

All proposals are required to be submitted on blank forms, copies of which can be obtained from the architects, and copies of which, with copies of contract and bond forms, are attached to the specifications for the information of intending bidders.

The County Commissioners' court reserves the right to reject any or all proposals submitted. GEO. H. LAW, JR.,
Attest. Clerk County Court,
Galveston County, Texas.
By GEO. F. BURGESS, Deputy. 16-1t

U. S. ENGINEER OFFICE, 136 Island St., Grand Rapids, Mich., April 20, 1897.—Sealed proposals for PIER EXTENSION at Muskegon Harbor, Mich., will be received here until 12 o'clock noon, May 19, 1897, and then publicly opened. Information furnished on application. C. M'D. TOWNSEND, Capt., Engrs. 16-4t

U. S. ENGINEER OFFICE, 366 Milwaukee St., Milwaukee, Wis., April 5, 1897.—Sealed proposals for DREDGING 50,000 cubic yards, more or less, at Green Bay Harbor, Wis., in Fox River below DePere, will be received here until 12 o'clock noon, May 6, 1897, and then publicly opened. Information furnished on application. GEORGE A. ZINN, Capt., Engrs. 14-4t

SANITARY DISTRICT OF CHICAGO.

TO CONTRACTORS.

Sealed proposals addressed to the Board of Trustees of the Sanitary District of Chicago, and indorsed: "Proposal for dredging the Chicago River between its mouth and Robey street," will be received by the Clerk of the said Sanitary District in Chicago, Ill., until 12 m. (standard time) of Wednesday, the 19th day of May, 1897, and will be opened by the said Board at a regular meeting held that day or later at a special meeting called for that purpose.

The work for which said tenders are invited is the dredging of the Chicago River to such widths and depths as are shown upon the plans or as shall be directed by the Engineer between its mouth and the West Fork in the South Branch of said river and between the junction of the South Branch with the West Fork and Robey street in said West Fork; and the removal of such docks and other obstructions as may be directed by the Engineer.

The volume of material to be dredged is approximately 600,000 cubic yards, which must be excavated, removed, and disposed of without further cost to the Sanitary District than is covered by the prices named in the bid.

Each proposal must be accompanied by a certified check or cash to the amount of $2,000.

All certified checks to be drawn on some responsible bank doing business in the City of Chicago, and be made payable to the order of the "Clerk of the Sanitary District of Chicago." Said amount of $2,000 to accompany each bid will be held by the Sanitary District until all of said proposals have been canvassed and contracts awarded and signed, the return of said check or cash to the bidder to whom said work shall have been awarded being conditioned upon appearing within ten days after notice of such award being given, with bondsmen, and executing a contract with the Sanitary District for said work so awarded, and giving a bond satisfactory to the Board of Trustees for the fulfillment of the same in the amount of $25,000.

All proposals must be made upon the blank forms furnished by the Sanitary District and must give the price of each separate item of work.

The bids will be compared on the basis of the Engineer's approximate estimate of quantities, which will be furnished with copies of the specifications.

No proposal will be considered unless the party making it shall furnish evidence satisfactory to the Board of Trustees of his ability to do the work, and that he has the necessary pecuniary resources to fulfill the conditions of the contract, provided such contract shall be awarded him.

Bidders are required to state in their proposals their individual names and places of residence in full.

Specifications and plans may be seen at the office of the Chief Engineer, Rialto Building, Chicago, Ill.

The said Board of Trustees reserves the right to reject the whole or part of any and all bids.

THE SANITARY DISTRICT OF CHICAGO,
By THOMAS KELLY,
President of its Board of Trustees.
Attest: JAMES REDDICK, Clerk.
Chicago, Ill., February 24, 1897. 14-4t

U. S. ENGINEER'S OFFICE, 136 Island St., Grand Rapids, Mich., March 29, 1897.—Sealed proposals for PIER EXTENSION at South Haven, Mich., will be received here until 2 p. m., April 27, 1897, and then publicly opened. Information furnished on application. C. McD. TOWNSEND, Capt. Engrs. 13-4t

U. S. ENGINEER OFFICE, Oswego, N. Y., March 23, 1897.—Sealed proposals for DREDGING at Little Sodus Bay Harbor, N. Y., will be received here until noon, April 29, 1897, and then publicly opened. Information furnished upon appliation. W. S. STANTON, Major Engrs. 13-4t

MILLER AUTOMATIC SIPHON

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INTERMITTENT FLUSH TANKS.

For Flushing Street Sewers and Sub-Soil Irrigation.

SPECIAL DESIGN
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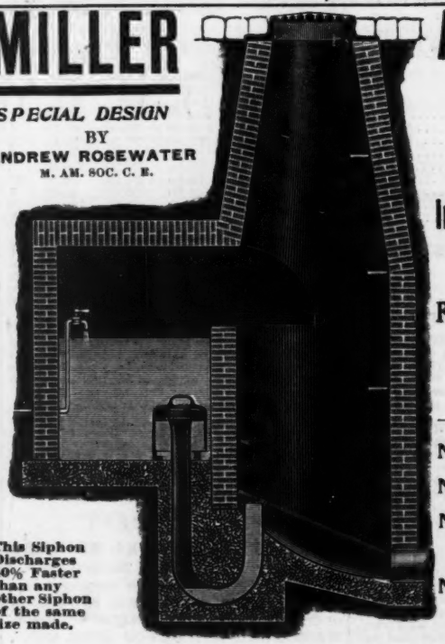

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No Moving Parts.
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No Small Tubes to Clog or Choke.
Nothing Whatever to Get Out of Order.

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Obituary .....
ENGINEERING
Coming Techni
NEW PUBLICAT
Trade Publicat
CONSTRUCTION
Condensed List
Railways ....
Street and Elec
Electric Light
Bridges .....
Buildings ....
Water-Works
Sewerage ....
Garbage Dispo
Streets and Ro
Manufacturing
Gas Plants ...
Miscellaneous
Contract Price
INDUSTRIAL N

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